



DEPARTMENT OF POLITICAL SCIENCE

MACROECONOMIC CONDITIONS AND EDUCATIONAL POLICY PREFERENCES

The case of youth unemployment and VET

Per Ahlin Olofsson

Master's Thesis:	30 higher education credits
Programme:	Master's Programme in Political Science
Date:	22/5-18
Supervisor:	Marius Busemeyer / Mikael Persson
Words:	16010

Abstract

On the subject of educational policy preferences, much are left to be said. Although the bulk of work on determinants has focused on welfare policies at large, a new strand of literature are making the case that education can be fruitfully integrated into comparative welfare studies. However, earlier models that tried to predict what kind of welfare policies an individual want depending on their exposure to risks are not as useful when it comes to education, and therefore new theories needs to be advanced. By focusing on the case of youth unemployment and preferring VET over general education, this thesis advances the discussion of educational policy determinants. By utilizing two separate datasets with their own set of strengths, this thesis first builds a multilevel logistic model to determine how youth unemployment affect the attractiveness of VET compared to general education with the Eurobarometer dataset. Secondly, the newly gathered INVEDUC dataset is used to gauge the effects of living in a country with high or low youth unemployment on preferring more VET.

In conclusion, although this thesis fails to find a direct effect of youth unemployment on educational policy preferences, it does find evidence for how micro-level determinants are shaped by youth unemployment and how their effect of educational policy preferences depend on the level of youth unemployment. For future research, it is crucial to consider causal heterogeneity based on macroeconomic and social conditions when conducting cross-national analysis.

Contents

1. Intro	4
1.1 Outline	4
2. Background and relevance.....	4
3. Literature review	7
3.1 Differences in Welfare State Policy	7
3.2 Policy preferences	8
3.2.1 Social Policy Preferences	9
3.2.2 Educational policy preferences.....	11
3.3 Social investment policies	14
4. Theoretical framework - determinants of educational policy preferences	16
4.1 Mechanism	16
4.2 Hypotheses	17
5. Research design and data.....	19
5.1 Dataset and variables - Eurobarometer.....	20
5.1.1 Dependent variable.....	20
5.1.2 Independent variable.....	21
5.1.3 Control.....	22
5.1.4 Interaction effects/variables.....	22
5.1.5 Method.....	23
5.2 Dataset and variables - INVEDUC.....	24
5.2.1 Independent variable.....	24
5.2.2 Dependent variable	25
5.2.3 Control variables	26
Method.....	26
6. Analysis	27
6.1 Eurobarometer	27
6.2 INVEDUC	31
6.3 Summary analysis.....	36
7. Conclusion.....	36
References	39
Appendix 1	48
Appendix 2	49

1. Intro

In an era with high youth unemployment, vocational education and training¹ is becoming all more popular as an efficient tool for policy makers to address the problem. However, the question remains regarding how this translates into popular demands for more VET. Systematic studies on the effect of youth unemployment on individual policy preferences have been notably lacking, and is often attributed to a shortage of suitable comparative data differentiating between different educational sectors. In addition, the available studies utilizing new data have either focused on micro determinants, and when discussing macro determinants, they have focused on feedback loops and therefore overlooked macroeconomic determinants. With this in mind, the topic of this thesis is:

What is the effect of youth unemployment on educational policy preferences?

With the specific research question:

What is the effect of youth unemployment on support for VET over general education?

This thesis does not establish a direct effect of youth unemployment on support for VET over general education. However, it does find that individuals who hold pro-VET views are more likely to recommend VET over general education when youth unemployment is high. This indirect effect hints that macroeconomic conditions, such as youth unemployment, shape the relationship between individual level characteristics and educational policy preferences, as well as confirm that preferences adapt to new social and economic problems.

1.1 Outline

This thesis will start by providing a context to the research problem and explain it's academic and social relevance. After that, the current scholarship on the subject will be discussed and their theoretical assumptions, as well as empirical findings, illuminated. Thereafter, the theoretical framework and mechanism will be presented and summarized, together with a presentation of this thesis' hypotheses. In the next section, the research design will be explained, the two different datasets, and the two different estimation methods will be discussed, together with an overview of the variables that are included in the analysis. This will be analysed in the following section, and the hypotheses will be addressed. Lastly, the conclusion will firstly present a quick summary of the thesis before the research question will be answered. After this, a brief discussion on how future research can contribute to the topics of this thesis will be discussed.

2. Background and relevance

Why do people value one type of education over another? Why would an individual choose general education over vocational education, or vice versa? This question has for a long time been understood as a question of individual choices, a question of why an individual would choose the educational track X instead of Y. As the focus has been on individual choice and educational outcomes, this question has remained in the domain of sociologists. In recent years though, this question has been increasingly tackled by political scientists, who conceived education systems as an

¹ Hereinafter abbreviated VET.

integral part of the welfare state (Iversen & Stephens, 2008; Jakobi et al., 2010; Busemeyer, 2015; Di Stasio & Solga, 2017). Pondering the initial question once again, but from the view of a political scientist, the question takes a collective and social character. Instead of voting with your feet by attending a specific education, what is of interest is an individual's educational policy preferences. This lifts the question from why an individual would choose an educational track for themselves, to why an individual would choose to promote one type of education over another on the social level, most prominently by accepting or advocating increased spending in that area.

On the question of individual educational policy preferences, a growing number of scholars have approached the question of its determinants². Although recent scholars on the subject seem to disagree with Harold Wilensky's proposition that "education is special", it is hard to argue that education is not *different* in certain aspects (Wilensky, 1975 : 3). Most notably, the age component is *prima facie* of more importance than for other kinds of social policies, as age³ is immensely negatively associated with the probability of attending education. Empirically, this has been proven to be the case as well for social spending at large; however, for education, the results are mixed and seem to be more context dependent (For social policies, see: Bonoli & Häusermann, 2009; Sørensen, 2013; for educational: cf. Busemeyer, 2009; Goerres & Tepe, 2010). A less obvious question is the effect of your economic position, as the redistributive character of educational systems are "messier" and less salient than traditional welfare systems, meaning that high income does not have to correlate with decreased support of educational spending for high income individuals as often assumed (Meltzer & Richard, 1981). Therefore, this thesis sets out to expand upon our knowledge about determinants of educational policy preferences, and also explore how their effects are contingent upon the social and economic environment the individual is in.

This question has both important theoretical and social implications. Policy preferences have increasingly been used as an explanatory factor in the perceived resilience of public policy, meaning that understanding what affects preferences is vital when assessing the space in which policy makers can act (Brooks & Manza, 2007; Rehm, 2011). VET is a key part of the European Union's strategy to remain economically competitive, and the goal is to produce world-class VET systems (European Commission, 2012). Seeing how advanced economies have been struggling with high youth unemployment and school to work transition, increasing VET was brought to the forefront as a solution to salient economic problems. As VET has been shown to increase employment rates at young ages compared to general higher education⁴, it acts as an efficient policy tool when the goal is to increase employment rates among young people (Hanushek et al., 2016; Forster, et al., 2016; Hampf & Woessmann, 2017). Furthermore, as the magnitude of this problem is vastly different

² For a recent literature review on the subject of public preferences for educational policies (with a focus on education spending), see Busemeyer et al. (2017a)

³ Same goes for public spending on pensions and elderly care of course, however it is a huge distinction that individuals of young age can expect to reap the direct rewards of these policies at an older age.

⁴ Although not relevant to this thesis, it is worth to point out that the same studies found that over an individual's life cycle this relationship reverses.

across countries⁵, it shows that institutional context and public policies plays a prominent role (Zimmerman et al., 2013). Public preferences matter if policy makers want to increase spending in certain sectors of education, and therefore the macro context that influences these preferences matters as well. If youth unemployment increases the willingness of the population to prioritize VET, this means that the problem carries with itself a unique window of opportunity to solve it. Conversely, if the effect is found to be non-existent or negative, then this either means that policy-makers can not count on the salience of economic issues when addressing them, or even have to take them into account as an obstacle. Lastly, this question is of normative relevance seeing that VET is increasingly pushed as a policy tool to counter youth unemployment. If this thesis finds no (or a negative) effect of youth unemployment on VET preferences, it means that policy makers are not reflecting the views of the populace at large.

Regarding academic relevance, this thesis will address and amend the current field of macro- and micro-determinants of educational policy and the interaction effects between them. Although large N analyses⁶ have been conducted on this subject, the earlier work lacked suitable data; which in turn hindered their ability to differentiate across educational sectors or account for cross-country variance. The most recent work on the subject have been able to utilize more fine-grained data on the subject and thereby address the earlier shortcomings, as well as provide some initial findings and theoretical assumptions⁷ in line with the hypotheses of this thesis. Most importantly for this thesis, it uncovers an initial descriptive correlation between high youth unemployment nationally and support for VET spending over higher education. The focus of this thesis will be to pick up on this initial finding and test the proposition that youth unemployment increases demand for VET spending. In addition, this thesis argues that when addressing macro determinants, the recent scholarship has been too focused on policy feedbacks from current educational institutions instead of macroeconomic conditions. Specifically, it argues that certain kinds of educational spending can be shown as being rational from the standpoint of material self-interest if citizens think that certain macroeconomic factors⁸ have a negative effect on them personally, for example, through increased taxes to support social security systems. In addition, this thesis aims to fill in some of the research gaps in the social

⁵ The obvious example is that Germany's youth unemployment dropped to single digits in the wake of the 2008-2009 recession, whilst Spain's increased to over 50% (Eurostat, 2017).

⁶ Hereinafter abbreviated LNA.

⁷ Busemeyer et al., writes in a newly published paper: "Depending on which sector of the education system spending is targeted on, wealthier citizens might be more willing to support additional spending if they believe that they will benefit directly", (2017a : 4)

⁸ This begs the question, why the focus on youth unemployment? Unemployment benefits in many countries are not directly funded by taxes but by employer/employee fees, or by union contributions, such as in countries with versions of the Ghent system. Unemployed youth therefore usually does not qualify for unemployment benefits, as they have not contributed to the system yet, meaning they will have to be supported by the general social security system, which is tax funded. This means that there's a much bigger economic incentive for people who pay taxes to limit youth unemployment.

investment literature⁹, as it conceives increased VET spending as an attractive policy with regards to the new emerging social risk for youths.

3. Literature review

In this section, the current state of the academic debate on the topic will be discussed as well as the current theories they espouse on determinants for social and educational policy. As a fully fledged theory has not been developed yet to explain why individuals prefer educational policy A over policy B, much of the current literature is deductive in its reasoning and the nature of the studies are usually exploratory. Therefore, this section will cover both empirical findings on the subject and accompanying theoretical frameworks as they have previously been applied, whereas the next section will summarize theoretical expectations in the form of hypotheses. As this argues that education can be understood as a part of comparative welfare studies, albeit with slightly different assumptions, this section will start with a historical overview of how the field came to be and why it differs from traditional works on the subject of welfare policies. In addition to this, the topic of preferences and policy preferences will be explored in general before approaching the specific subject of educational policy preferences. Lastly, social investment policies will be introduced as a concept that offers a promising way to differentiate educational policies according to how successful they are at combating a specific social or economic problem.

3.1 Differences in Welfare State Policy

Earlier explanations of the growth and configuration of redistributive policies focused on the strength of left parties and labor unions¹⁰, stressing the class cleavages that capitalism gives rise to (Esping-Andersen, 1990; Korpi, 1983). Conversely, rivaling theories tried to explain diverging welfare states through an employer-centered approach, where the Varieties of Capitalism¹¹ has come out as one of the most dominating (cf. Swenson, 1991; Hall & Soskice, 2001). As the VoC approach placed a heavy emphasis on skill formation, the argument was that in order to understand countries' different political economies, understanding different educational systems was paramount (Estevez-Abe et al., 2001). Specifically, these different “welfare production regimes” stressed the importance of the interplay between social protection and individual skill profiles, as certain skills carry with

⁹ This research gap was notably pointed out in a recent special issue of *Journal of European Social Policy*, where Di Stasio & Solga makes the claim that:

Often, research tends to refer to educational attainment or spending in rather general terms, without distinguishing between (pre)primary, general, vocational and adult education and training (see, for example, Nikolai, 2012). This is unfortunate as it neglects important interdependencies between the different educational sectors, for instance, with regard to the distribution of educational opportunities across social groups[...]. (2017 : 314)

¹⁰ This has been dubbed Power Resource Theory, hereinafter abbreviated PRT.

¹¹ Hereinafter abbreviated VoC.

them their own risks (Iversen, 2005). In a seminal paper on this issue by Iversen & Stephens, they propose a successful synthesis of PRT and the VoC approach which would reintegrate education and training systems into welfare studies, proclaiming that:

[...] most comparative welfare state scholars have followed Wilensky (1975), who observed that “education is different” (p. 3) and thus excluded it from his analysis. But skills and education are at the core of the welfare state. Incentives to acquire particular types of skills are closely related to both social protection and economic performance, and educational spending is not only a partisan issue but also one with profound implications for the distribution of income. Education and training systems can fruitfully be reintegrated into comparative welfare state analysis. (2008 : 602)

The idea that education can be understood as a central part of the welfare state is captured by the fact that education spending is positively related with public spending, but a deeper analysis of “off-the-line” cases shows an important national difference between countries. Following this idea, multiple works have provided important insights to how educational regimes have important national differences: with regards to public vs. private financing, public funding for education across different sectors, organization and relevance of vocational training, just to name a few (Busemeyer & Nikolai, 2010). An important question then becomes: what explains the observed variation, and what sustain it?

3.2 Policy preferences

Returning to the question of observed variation between welfare states, the first question is somewhat¹² outside of the scope of this thesis; however, the latter is highly relevant. In the seminal works of Pierson, this question was asked in the form of: “What explains the apparent resilience of welfare states in an era where it’s opponents held vast political power?”¹³ (for example, see: 1993; 1994; 2000). Brooks & Manza, while acknowledging the explanatory power of PRT and the VoC approach, posits that it’s quite simple: because people like them (Brooks & Manza, 2007). Understanding individual policy preferences therefore plays a dual role; from a normative perspective, congruence between what the public at large wants and the policy output of a government is a foundational element in a democracy. This point has often been raised as an issue of representation by several scholars (e.g. Pitkin, 1967; Saward, 2008). Secondly, and echoing the conclusion of Brooks & Manza, as public opinion has been found to have a substantive effect on

¹² Only in the sense of its emergence; this thesis won’t be focusing on this question from the perspective of historical institutionalism, however an introduction to the subject with a focus on VET can be found in Thelen (2004) and for the case of higher education, Garritzmann (2016). Policy preferences can of course be used to both understand why something is different, and how it stays different.

¹³ This is of course paraphrasing.

public policy, it is paramount to understand preferences if one sets out to understand a policy's longevity or demise (see Burstein, 2003 for a literature review on the subject). Consequently, this begs the questions: what exactly is a preference, and how does it come to be? With the first question in mind, Druckman & Lupia offer a useful definition in their review of the concept, where they write:

We define a preference as a comparative evaluation of (i.e. a ranking over) a set of objects. A preference serves as a cognitive marker that reminds people how to interact with various aspects of their environment. Preferences are stored in memory and drawn on when people make decisions. (2000 : 2)

Adding the word policy would then entail an individual's ranking of a policy considering a finite set of possible other options. This could include the status quo preference of not wanting any new policy at all, which often is the case when voting on a referendum. For this thesis, this definition of policy preferences will be used as it goes well in line with the research question and shows the comparative nature of a preference, and how it only exists together with other choices. On the second question, Page & Shapiro argue in one of the seminal works on the subject that preferences are formed on a rational basis (1992). In this sense, they are shaped by the best available information, are organized in coherent patterns, and are changeable depending on external stimuli. Although individuals can exhibit "rational ignorance", individual ignorance transforms into collective wisdom when considering a larger number of preferences (ibid : 14-15). Another way of thinking of this would be to conceive preferences to be formed on the basis of bounded rationality, i.e. "[...] that most behavior in politics is adaptive and intendedly rational but that limits on adaptive behavior, imposed by human cognitive/emotional architecture, may be detected in even the most stable of environments" (Jones 1999 : 298). In general, this means that individuals are expected to change their preferences according to predictable patterns when subjected to external stimuli, e.g. new information or new circumstances. An in depth study of one individual might not show this; however, when aggregating a large number of preferences in lieu of a societal phenomena, this becomes apparent. For this thesis, this can be taken one step further, as the collective response of individuals can also be summarized according to where they live or according to some interesting form of clustering that is deemed relevant. By doing this, country level characteristics can be found in the form of predictable patterns if the number of countries is enough, which is also the basic preposition that this thesis intends to uncover.

3.2.1 Social Policy Preferences

Momentarily side-stepping the direct question of differences in educational system momentarily and remembering the proposition of Iversen & Stephens, i.e. that education can be integrated into comparative welfare studies, leads us to broaden the question and look at social policies at large. This raises the question: what determines an individual's social policy preferences? The common wisdom in the field has moved away from earlier deductive assumptions about a direct link between

welfare state preferences and socioeconomic position to risk-centered explanations¹⁴ where an individual's preferences are deduced from how the social policy at hand protects them from individual risks (cf. Meltzer & Richard, 1981 and Cusack, Iversen, & Rehm, 2005; Rehm, 2009; Rehm, 2011; Rehm, Hacker & Schlesinger, 2012, Hacker, Rehm & Schlesinger, 2013). With this approach, micro-factors such as age, education, social class, employment status, and gender become variables reflecting differences in social risk. For example, one can see that woman (coded as one possible value of gender) are often used interchangeably with “the person who is most likely to stay at home with children”, as this is the specific risk that female bearing/rearing individuals tend to have with regards to the labor market and employability (see Estévez-Abe et al, 2001; Iversen & Soskice, 2001). Studies following this approach have subsequently found that people who have the most to gain from redistribution, i.e. the unemployed, the least educated, members of the working class, and low-income individuals, also show the most support for welfare state policies (see Svallfors (2012) for an overview). This camp in the literature that emphasizes the role of material self-interest can be seen as one out of three different ones (Busemeyer & Garritzmman, 2017). Besides self-interest based explanations, norms, religion, and ideological positions have also been found to influence individual preferences, as well as macro-factors such as institutional context (Hasenfeld & Rafferty, 1989; Kangas, 1997; Jæger, 2006; Lupu & Pontusson, 2011; Stegmueller et al., 2012; Gingrich & Ansell, 2012; Kumlin & Stadelmann-Steffen, 2014). Although ideological positions can be an outcome of material self-interest, meaning there's substantial empirical difficulties analyzing the effect of them separately, economic insecurities have been shown to significantly decrease ideological determinants. For example, in the context of the great recession of 2008 in the US, “experience of the economic shock does indeed lead to a convergence in the welfare preferences of harmed individuals who prior to the shock held distinct political views.” (Margalit, 2013 : 81). This finding is also in line with the theoretical assumptions of this thesis, that economic factors that are temporally contingent play a key role in determining individual policy preferences. This is not only relevant for the specific case at hand (i.e. impact of an economic shock on preferences), but also for understanding how rigid preferences are and how they are not only formed by your social position, but also how individual's preferences adapt to shifting circumstances. However, it is important to note the key difference between Margalit's focus and this thesis, i.e. that he measures personal experience of economic hardships, and not how the general state of the economy affects individual preferences. Although it would be interesting to look at how personal experiences of unemployment, specifically for young people, affects educational policy preferences, this paper posits that unemployment as a country-level phenomena is more likely to have an effect when it comes to educational policy preferences. First, it is argued that individual unemployment status is more likely to be a factor for social policy at large, specifically when it comes to preferences for unemployment benefits. Secondly, Blekesaune & Quadagno finds that even in this case, country-level unemployment matters more than individual level unemployment status when it comes to social policies directed towards unemployed people (2003). Since VET is imagined to be a type of policy field with a big impact on youth unemployment, the theoretical assumption is that country-level variables have a bigger impact. On this topic, other scholars have assessed how country-level

¹⁴ This also presupposes a view of welfare as a form of social protection, which has been dubbed the *governmental protection hypothesis* (Blekesaune, 2007).

explanations (e.g. the institutional context) affect social policy preferences. For example, Brady & Finnigan measure the effect of immigration on social policy preferences, not by utilizing individual experiences of immigrants as the independent variable, but by using country level variables such as the amount of foreign born individuals and net migration rates (2014). On the highly relevant topic of country-level unemployment, earlier studies have showed that high unemployment rates correlate with more favorable views of welfare policies in general, and particularly policies targeted at the unemployed (Blekesaune & Quadagno, 2003; Blekesaune, 2007). Conversely, when Jæger studies how macroeconomic and social conditions affect the demand for redistribution, with unemployment being one out of five conditions, he does not find an effect of unemployment on the demand for redistribution (2013). Although the subsection “Social investment policies” will explore this further, it is worth noting that it’s hard to translate what demand for redistribution means in the context of educational policy preferences. This is especially true for this thesis, where it’s not possible to simply say that VET is less redistributive than general education, or vice versa, as this is contingent on the education system at hand (how it is funded, how inclusive it is, etc.). The same kind of reasoning can be used for risk-based explanations for support of social policies. It is not reasonable to think that individuals base their educational policy preferences on what type of risk-class they are in, as education does not protect an individual from risk in the same way that typical social policies do, such as unemployment protection policies. Education can rather be seen as a preemptive form of social protection, instead of a compensatory one.

3.2.2 Educational policy preferences

On the topic of education policy, two things have made it particularly hard to study individual policy preferences. First, the earlier observation of the complex redistributive character of educational systems makes it harder to just apply the explanations of general social policy preferences¹⁵. Risk-based explanations are not as usable in the context of educational policy, as it have a more preventive than compensatory role. Secondly, just as different social policies have different redistributive effects when they affect different social strata, being able to distinguish between social policy A and B (for example, pensions and workers compensation) is paramount. This data has existed for social policies at large, however they have been noticeably lacking for educational policies (Busemeyer et al, 2017b). Although Ben Ansell’s description of education as an “archetypical crowd-pleaser” is prominently found in the literature, all education is not equal, and therefore it is crucial to be able to differentiate between different types of educational sectors when assessing individual educational policy preferences (2010 : 136). When it comes to higher education vs. primary education for example, Ansell notes that:

¹⁵ In one of the newest works on the subject, Busemeyer et al., concludes that: “The case of education is different from other social policies, however, because it is less redistributive and therefore more popular with middle-class and wealthier citizens” (2017).

Typically universities have been the domain of the elite, whereas primary education has been accessible to the nation at large. Hence, the rich will try to bias spending in the direction of the former, while the masses advocate for the latter. (2008 : 415)

This quote shows two common characteristics of the field; firstly, that material self-interest as a determinant of educational policy preferences has different outcomes depending on the education system at hand, and secondly that education *spending* preferences have been utilized in the field as a variable which has comparability across systems. On the first point, the design of education systems, and particularly the restrictive character of certain sectors, determines the overall distributional character of the system. In systems with higher levels of educational stratification, i.e. the more restricted access to higher education is, the likelier it is for wealthy individuals to support education spending on that sector (Ansell, 2010). On the basis of material self-interest, richer individuals can expect their own children to benefit from increased public spending on education, as their own children are more likely to benefit from additional funding. This is in line with the findings of Garritzmman on financial aid for higher education, who concludes that material self-interest, together with political ideology and positive feedback effects, determines support for financial aid (2015). If one assumes that children of richer individuals are more likely to attend general education compared to VET, then higher income should be negatively correlated with support for VET.

The two aforementioned studies by Ansell and Garritzmman both envision macro effects as mostly stemming from feedback effects, a focus that is not unusual in the available literature on educational policy preferences. Because of the varied nature of educational systems over different political arenas, as well as its centrality in disseminating information, education has been described as a particularly good area to advance the studies of feedback effects (McDonnell, 2009). Although other macro factors have not been studied as extensively, there are some studies devoted to this. On the subject of macroeconomic effects, one of the earliest works showed how socio-economic inequality has a positive effect on preferences for educational spending. In addition to this, the study provides additional evidence for the finding of Ansell, as he shows how the effect of income on increased spending preferences is contingent on the institutional context; specifically, wealthier individuals are more likely to support increased public spending if access to higher education is restricted (Busemeyer, 2012). However, in general, studies have notably neglected the role of macroeconomic factors¹⁶, which this thesis argues fails to properly understand education policy as an active policy tool to combat socio-economic problems. Overlooking macroeconomic conditions and only focusing on micro factors runs the risk of conceptualizing preferences as static and unwilling to change to their external surroundings.

Although studies that discerns between educational sectors have been lacking, they have not been non-existent¹⁷. For the case of Switzerland, Busemeyer et al. conclude that income does not seem to matter when differentiating between educational sectors (2011). Rather, they conclude that “[...]”

¹⁶ One exception is the study by Busemeyer & Jensen (2012) that will be discussed in the next section.

¹⁷ Although mainly descriptive, see Wößmann et al. (2014) and Lergetporer et al., (2017) for the case of Germany.

differences in educational policy preferences concerning the types of education to promote can be explained by individual educational background” (ibid : 269). However, it is important to note here how they define educational sectors, which are divided into four different categories: compulsory school, apprenticeship training, academic education (including higher vocational training), and continuing education. This is especially important because when they later restrict the choice to either academic or vocational education, income plays a significant role in determining preferences; meaning that even after controlling for educational background lower income correlates with preferring vocational education. Comparing this to classical welfare policies, the differences in determinants becomes apparent: where for example, Häusermann et al. concludes that for welfare state policies, labor market vulnerability exceeds the effect of education on policy preferences (2015). Although the Swiss study is significant for this thesis, as it explores a very similar topic, it falls short seeing that it is unclear if its results are generalizable to other countries or other educational contexts. Moving beyond national studies, Busemeyer & Jensen study how the degree of economic coordination and educational institutions impact preferences for academic and vocational education. Utilizing similar data as this thesis, i.e. Eurobarometer from an earlier year, they show that the impact of educational background is stronger in educational systems with a high share of students in vocational training (2012). Although the study is conducted in a cross-national fashion, the data it uses (Eurobarometer 62.1 to be precise) lacks measures of income and educational background, which has been shown to have a significant effect on educational preferences. Comparing this study to the one Busemeyer et al. did in Switzerland shows the trade-off in earlier studies, where one either had to sacrifice precision in key variables by utilizing existing datasets, or sacrifice external validity by conducting analyses with national data. For example, in addition to missing educational background and income variables, Eurobarometer 62.1 technically does not ask about educational preferences, but which educational track one would recommend to someone finishing secondary/compulsory education. This can of course be highly relevant as it illuminates what individuals find more attractive, academic or vocational education; however, it is not the same as asking what policy an individual would prefer. It does however gain a lot of relevance since the question is asked for an hypothetical other and not themselves, which is arguably more related to educational *policy* preferences and not just educational preferences.

Turning to the latest finding in the field of educational policy preferences, a new survey¹⁸ has allowed several new papers to be published that are both able to discern between educational sectors, as well as look cross-national differences. Three of these papers are of specific importance to this thesis, as one of them explores preferences of individuals with regards to VET vs. general education, and the other two investigates preferences between passive transfers and social investment policies. Concerning the first paper, Busemeyer & Garritzmänn are able to generalize the findings found in Switzerland, namely that educational background is a significant determinant when it comes to spending preferences between VET and higher education (2017b). Conversely, they fail to replicate the finding that higher income correlates with a higher preference for vocational training. Moving

¹⁸ Referred to as the INVEDUC survey, it was done within the “Investing in Education in Europe: Attitudes, Politics and Policies” project. Although this survey will be discussed further in the “Data” section of this thesis, please see Busemeyer et al. for a longer discussion about the rationale behind the survey and the techniques used to gather the data (2018a : 38-40).

beyond individual level determinants, the authors look at the support for increased spending on different educational sectors with countries as the level of analysis. An interesting finding is that all other countries have a higher demand for VET than Germany, a country often used as a shining example when it comes to promoting policies combating youth unemployment. This difference is much lower when it comes to higher education, however it is noteworthy that Italy, Ireland and Spain have almost identical preferences for VET and higher education when accounting for socio-demographic factors. Another puzzle according to their findings is Denmark, which despite having a comparatively low degree of youth unemployment still exhibits a comparatively high degree of preferences favoring VET. In addition to this, this new survey also allowed for testing of earlier assumptions about the nature of feedback effects between educational preferences and educational institutions, where they for the most part found evidence of a negative feedback effect, as suggested by Soroka and Wleizen (2010) (Busemeyer et al., 2018). This means that individuals tend to reject additional investments in educational sectors already prevalent in their country, but this is dependent on the perception of how these sectors are doing, i.e. the socio-economic conditions of the country vis-à-vis the output of that sector.

3.3 Social investment policies

Lastly, the recent findings from the INVEDUC survey contributes to the emerging literature on “social investment policies”, which places a bigger emphasis on developing individual human capital as a way of combating new social risks, compared to traditional social transfer policies (Giddens, 1998; Esping-Andersen, 2002; Morel et al., 2011). In a simplified way this shift can be understood according to the old saying attributed to Maimonides: “Give a man a fish and you will feed him for a day; teach a man to fish and you feed him for a lifetime”. Instead of focusing on compensatory policies meant to reduce inequality of resources, this approach instead focuses on reducing inequalities of capabilities¹⁹; which on a macro level can be seen as a shift from fighting unemployment to promoting employment (Hemerijck, 2013). In addition, these policies are seen to protect individuals from new social risks, driven on by the shift to post-industrial, low economic growth societies where low- and unskilled workers have significantly higher job insecurity (Taylor-Gooby, 2004). What is of great importance for this thesis is the fact that they are believed to be very popular among the public²⁰ (Busemeyer 2012, Garritzmman, 2015). Returning to the second paper of importance from the INVEDUC survey, this is once again confirmed by Busemeyer & Garritzmman,

¹⁹ For example, by focusing on active labor market reforms to lessen the need for social assistant programs.

²⁰ Busemeyer et al., makes a very clever observation with regards to their findings that education is the second most popular popular policy field, after health care:

Given the fact that education is immediately relevant only for a minority (i.e. mostly parents with children in school or students and workers still benefiting from university education or other forms of post-secondary continuous education), public support for additional investments in education is indeed significant. (2017a : 8)

This can be seen as an indicator that raising the capabilities of the general population remains something that is very popular at large, and not only for the ones directly affected by it.

who find that social investments are generally very popular (2017a). A key finding in their paper is that this popularity is contingent on a *ceteris paribus* type of reasoning, where there's no conflicts between social investment policies and any other policies. Introducing this conflict, in the sense of asking respondents if they are willing to finance spending increases in education by cutting back spending in other spending areas, such as pensions, has a massive impact on the level of support for increased education spending, as it drops by 45.6 percentage *points*. But is it reasonable to expect that everyone is affected equally by introducing this increase? Would it not be reasonable to expect that a high-income individual would rather pay for social investments policies than unemployment benefits, especially if they are unlikely to take advantage of them themselves²¹? In the third paper from the survey, this is confirmed when asking if the respondent would support spending increases in lieu of unemployment benefits, and then accounting for income in the model (Neimanns et al., 2018). In an unconstrained setting, individuals in the highest income quintile are not significantly associated with higher education spending; however, when it is coupled with decreasing compensatory spending, it is. This would be expected in a setting when they are likely to be on the hook for compensatory spending, meaning that the effect is dependent on the generosity of welfare policies and progressive nature of the tax system.

The slightly abstract definition of a social investment policy makes it hard to delineate what exactly should be included under the term, as many different policies can develop human capital. In the context of this thesis, it is more relevant to understand differences *between* social investment policies, as investing more in VET or higher education both are assumed to assist with human capital formation, albeit in different ways. Crucially, they also affect different stratas of the population and have different effects on the labor market. A more fruitful point of departure is therefore to discuss what is an *effective* social investment policy vs. an ineffective one. In order to decide this there has to be some kind of operationalizable outcome that are deemed more desirable than other, but which outcomes are relevant? On this subject, De Deken talks about three different output variables that can be studied: labor market outcomes, effect on socio-economic inequality, and benefit caseloads (2017). If country A used policy X and country B used policy Y, one possible way of analyzing their effectiveness from the standpoint of social investments would be to analyze the shift in labor market participation as a result of these policies. If we assume that country A and B are both trying to combat the same problem, let's say youth unemployment, and policy A is increased spending on higher education, and policy B is increased spending on VET, the effectiveness of each policy would be determined based on the effect it has on labor market participation rates for young people, compared to the cost of each policy. Therefore, depending on some salient macroeconomic conditions, one social investment policy can be deemed by the populace to be more effective at combating a certain phenomena, and consequently it will be deemed more attractive.

Social investment policies can seem a bit outside of the scope of this thesis, however it introduces another way of looking at educational policy as a preemptive policy tool for social and economic

²¹ If we introduce another person to the quote from Maimonides, let's say the fisherman who provides the free fish, this can be illustrated by considering what is economically rational for him. Instead of giving another person a free fish for 20 years, it is better to take a couple of days off work and teach the other person to do this themselves. The loss of fish from a couple of days off is much smaller than the ones that will be continuously provided over 20 years.

problems that affects individuals, even though they are not themselves directly affected by it in negative ways. If education can be seen as a type of social investment, then finding determinants will not follow the regular patterns, seeing that education is not about protecting oneself against risk, it's rather a way of maximizing your material gains as the national character of social security systems makes it economically costly for you when a lot of people are using safety nets. In addition to this, youth unemployment have negative consequences for the labor market overall, and can reduce the growth of a country, thereby forcing the government to slash spending or raise taxes even more. Basically, if earlier works looked at the probability of you as an individual becoming unemployed, the focus with this approach is instead looking at how your specific position in society makes social and economic phenomena affect you. Using unemployment as an example again, it is not whether you yourself might get unemployed, but rather that you are on the hook for the social spending that can be assumed to increase during times of high unemployment. By focusing on macroeconomic factors instead of individual ones, this thesis is closer in line with the logic of Melzer and Richard, whereas demand for job-creating measures can be seen as a result of "occupational inequality". In simpler words, this can be understood as when "[...] new social problems arise, it is not surprising if people tend to want their government to do different things" (Page & Shapiro : 330). Instead of preferring unemployment protection, you might instead support the policy which you think has the best chance of combating unemployment, which in turn will mitigate the negative economic consequences it has for you. If one look at educational policies as a form of social investment policy, it might be easier to find a common framework for determinants for other types of social investment policies, such as active labor market policies for example.

4. Theoretical framework - determinants of educational policy preferences

In this section, the theorized mechanism will be further explained. In addition to this, the hypotheses will be presented together with a quick summary of the determinants discussed in the earlier section.

4.1 Mechanism

Individuals are presumed to form their opinion on a rational basis, which is a balancing act between their own interest and available information. This thesis conceptualizes youth unemployment as a type of social problem, which has ramifications for the rest of the society in the form of a worse performing economy, as well as an economic cost in the form of increased taxes to fund unemployment benefits. As VET has increasingly been hailed as an effective way of creating the necessary skills for young people to get employment²² and is both cheaper and takes less time than general academic education, individuals are assumed to see VET as a good solution to the problem of youth unemployment. As individuals are informed about the current youth

²² An expected critique would be that although it is rational to want to spend more money on VET to combat youth unemployment, it is not reasonable to expect that everyone knows this. However, all it takes is that a critical minority in each risk class has a keen understanding of their own position and how a specific policy affects them, in order to observe an effect (Armingeon & Bonoli, 2006).

unemployment figures through different channels (TV, newspapers, friends, etc.), they are expected to try to mitigate negative consequences through their available means, which in a representative democracy entails supporting policies that they find to be a solution to the problem. Therefore, individuals who live in a society with high youth unemployment are expected to prefer VET over general higher education as a way of trying to mitigate negative economic consequences for themselves, and this change should be able to be captured by existing social surveys on the topic.

4.2 Hypotheses

Owing to the mechanism suggested above, three different hypotheses can be postulated. As individuals are influenced by macroeconomic factors when deciding between policies, and youth unemployment is a salient topic that has major ramifications for the rest of the population, the first hypothesis can be formulated as:

H1: Higher levels of youth unemployment makes VET more attractive. (Direct effect)

However, this relationship is certainly not straightforward. Busemeyer & Garritzmann find that determinants of educational preferences are different when it comes to redistributive conflicts *within* the state compared to the conflict about the *size* of the welfare state, namely that an individual's ideological position matters less and his/hers membership in a welfare state beneficiary group matters the most, i.e. that on the micro-level material self-interest is a big factor. This is in line with earlier works on the subject that observed a link between individual cost-benefit analysis and propensity for increased educational spending (Ansell, 2010; Busemeyer 2012; Busemeyer 2015; Garritzmann, 2015). Individual income is therefore expected to affect educational policy preferences by affecting the propensity for policies that are deemed to be redistributive in character. However, this relationship is moderated by the levels of youth unemployment in your country, as it is even more relevant for high income individuals to recommend VET as a solution if there's high youth unemployment in the country. For individuals with high income, an increase in VET spending can be seen as a way of reducing other social spendings, and compared to higher education they won't be suffering from crowding out effects, as they themselves are more likely to have attended higher education. Therefore, income is suggested to both have a direct effect, however what is of specific importance is the moderating effect youth unemployment has on this effect. Thus,

H2: The effect your economic situation has on preferring VET over general education increases when youth unemployment increases. (Moderating effect)

As income is suggested to change an individual's response to youth unemployment, it is of course reasonable to suggest that the response is also moderated by perceptions about VET in general. It is not reasonable to expect that the theorized effect will be observed in an individual who does not think that VET leads to increased chances of getting a job, or thinks negatively about VET in general. If an individual has a positive view of VET themselves or thinks VET has a positive image in their country, they are more likely to recommend VET over general education during high levels of unemployment. Therefore, the third hypothesis is:

H3: Individuals who perceive VET as something positive are more likely to recommend it during high levels of youth unemployment. (Moderating effect)

These three hypotheses are illustrated in Figure 1 and 2, where relationship A relates to hypothesis 1, relationship B in figure 1 to hypothesis 2, and relationship B in figure 2 to hypothesis 3.

Lastly, these hypotheses would not be able to be convincingly tested if educational background wasn't included in the dataset, as a background in VET is assumed to be correlated with a lower income compared to higher education, and also has a direct effect on educational policy preferences. It is often seen as a major determinant of educational policy preferences, as your education has a strong socializing effect on you as an individual. As individuals have been shown to favor spending in the educational sector they themselves attended, it is crucial to be able to account for educational background, which makes the decision to leave out Eurobarometer 62.1 even more sound. However, as educational background is not the main focus of this thesis, it will be included as a control variable.

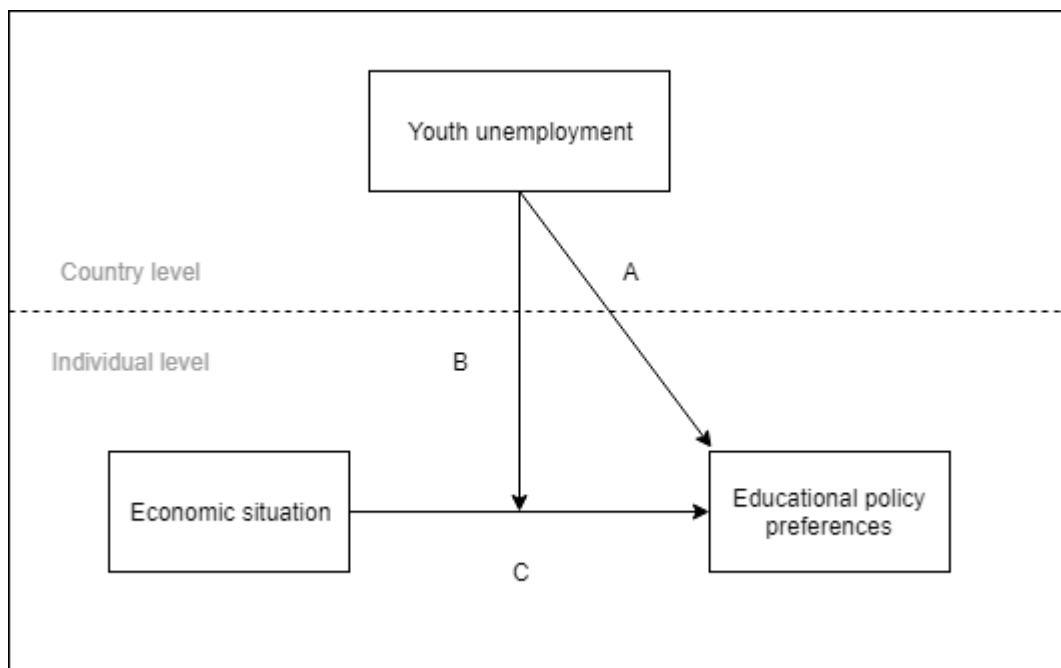


Figure 1: The proposed relationship between youth unemployment, individual economic situation and educational policy preferences.

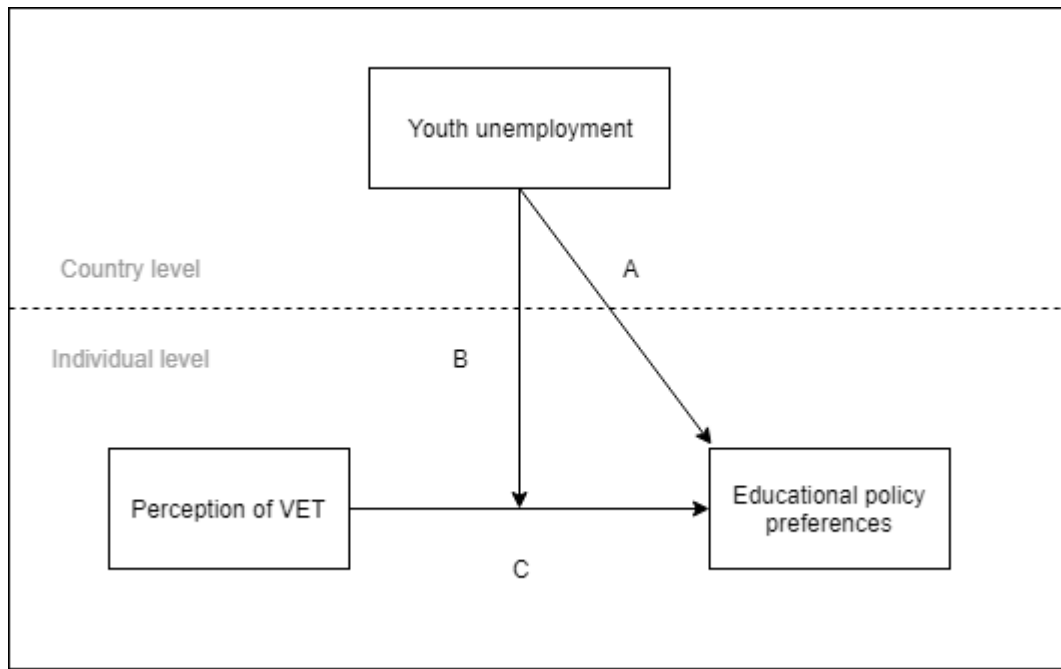


Figure 2: The proposed relationship between youth unemployment, perception of VET, and educational policy preferences.

5. Research design and data

A common problem in quantitative analysis with cross-sectional data is conceptual stretching, and in the debate between quantitative vs. qualitative analysis this has often been described as one of the pitfalls of large N analysis (Sartori, 1970). At the same time, the problem of “many variables, small number of cases” inherent to qualitative approaches makes external validity a big problem, as well as controlling for contextual factors in order to gauge the direct effect (Lijphart, 1971 : 685). Seeing how the research question involves macro-level effects on individuals living in different countries, a multi-level linear/logit regression would be a typical approach to answer the research question. This would rely on a data-set that covers enough countries to have variance on the dependent variable, such as ISSP, ESS or Eurobarometer. However, as noted in Busemeyer et al., (2017), Busemeyer & Garritzmann (2017) and Busemeyer et al., (2018), these datasets usually only contain general social policy questions, and if they include education policy, it’s not broken down by sectors. This means that although they have enough variance on the dependent variable, their questions are not ideal from an educational *policy* perspective. Conversely, the survey from the INVEDUC project asks questions that are very precise and therefore it would be a better operationalization of the dependent variable, however the relatively small number of cases in comparison to variables makes it impossible to conduct a meaningful multilevel statistical analysis. Taken apart, these weaknesses negatively impact the ability to draw causal inference. However, taken together, they can amend each other and the strengths of both approaches can be harnessed. Therefore, this thesis intends to utilize a two-step

procedure with two different dataset, focusing on two different aspects of the research question in each of them and utilizing two different statistical analyses.

5.1 Dataset and variables - Eurobarometer

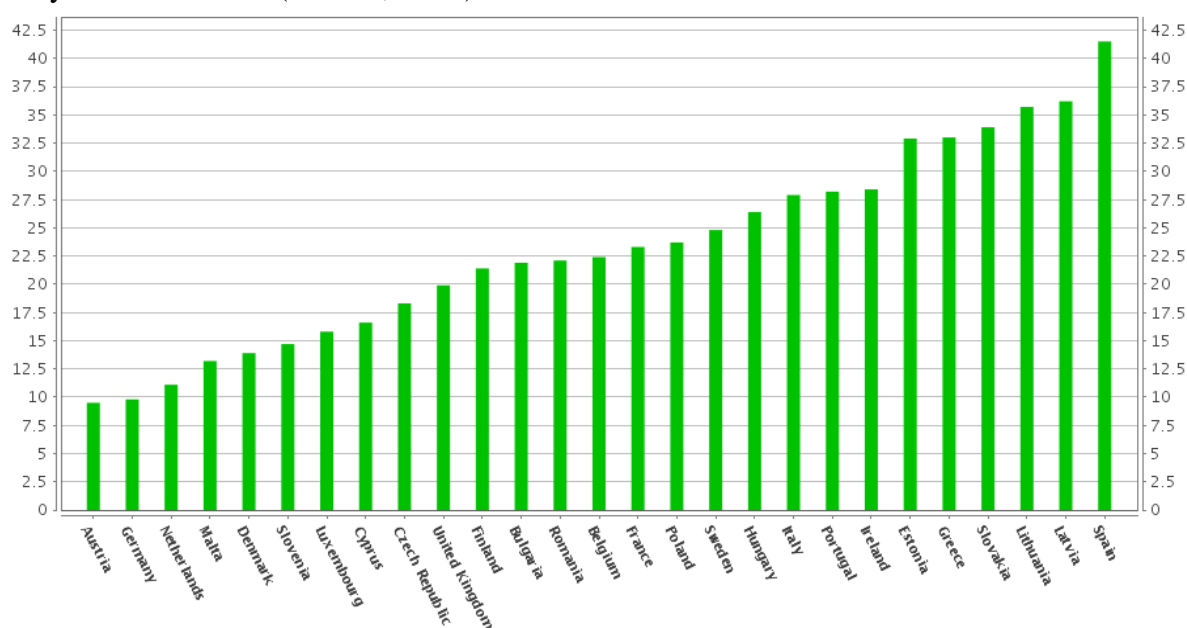
The Eurobarometer dataset comes from a survey done by the European Commission, and has been aiding social scientists since it started in 1973. It consists of approximately 1000 face-to-face interviews done per country, with about half of that for the smallest EU countries (Malta, Luxembourg, Cyprus) and a bit more for the larger ones (UK, Germany).

5.1.1 Dependent variable

As youth unemployment is theorized to affect individual educational policy preferences by making VET seem more attractive, the first step of the analysis will focus on this and not specifically on the question of policies. Eurobarometer 62.1 from 2004 and Eurobarometer 75.4 from 2011 both have a question relating to this, asking what an individual would recommend to someone finishing compulsory/secondary education. This is the same question that Busemeyer & Jensen (2012), as well as Di Stasio (2017) use to capture educational preferences for academic or vocational education; which his thesis argues is a good operationalization of attractiveness. It does this because it does not ask what that individual would prefer themselves, but what they would recommend to an abstract person. In Eurobarometer 62.1 the question is “Nowadays, which of the following would you recommend to a young person who is finishing compulsory education or secondary education?”, with the three options: General or academic studies, Vocational training or apprenticeship, or lastly, it depends on the person. Eurobarometer 75.4 similarly asks the respondent to recommend an educational path to a young person, however they instead ask: “Nowadays, which of the following would you recommend to a young person who is finishing compulsory education?”. The options are: General secondary or higher education (coded as 0), Vocational education and training (coded as 1), or, it depends on the person. The first question differentiates between compulsory and secondary education, and in the answers general and academic is grouped together, as well as vocational training and apprenticeship. In the 75.4 survey, secondary is dropped from the question, and in the answers higher replaces academic and training replaces apprenticeship. Although the two questions are arguably close enough to combine into the same analysis, the Eurobarometer 62.1’s lack of educational background is of great concern as it removes the ability to control for one of the most prominent factors. In addition to this, it does not contain anything that could be thought of as a proxy for income, or social background, which is hypothesized to have an effect on an individual’s educational policy preferences. Therefore, this thesis will only use Eurobarometer 75.4, seeing that the gain in the number of country-years is not enough to offset the ability to draw causal inference with relevant controls.

5.1.2 Independent variable

The selection of countries are based on them being included in the survey, which are: France, Belgium, The Netherlands, Germany²³, Italy, Luxembourg, Denmark, Ireland, Great Britain, Northern Ireland²⁴, Greece, Spain, Portugal, Finland, Sweden, Austria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, Slovenia, Bulgaria, and Romania²⁵. For all of these countries, youth unemployment is gathered from Eurostat, that gathered the data through the EU Labour Force Survey (EU LFS). The specific operationalization of the independent variable is: the unemployment rate of people aged 15 - 24, as a percentage of the labour force of the same age. Considering the direction of causality between preferences and youth unemployment, and that the date of collection for Eurobarometer 75.4 is June 2011, the figures for youth unemployment will be taken from the 2010 measurement, to be certain that they are gathered prior. As Eurostat calculates annual averages in employment rates by taking the average of quarterly results, the annual figure for 2011 would include two measurements that happened after the survey. Additionally, as individuals are expected to gain information about youth unemployment throughout various media sources and public service, it is reasonable to assume that there's an "informational lag" between the levels of youth unemployment and the public becoming aware of them. The differences between the selected countries can be seen in Graph 1, where it is worth pointing out the 32 percentage points difference between the country with the highest youth unemployment (Spain, 41.5%), and the country with the lowest (Austria, 9.5%).



Graph 1: The percentage of individuals aged 18-24 unemployed in the selected countries. Data from 2010. Source: Eurostat.

²³ Divided in the data-set as East/West Germany, however merged together for the analysis.

²⁴ Northern Ireland and Great Britain are merged together as the United Kingdom since Eurostat collects youth unemployment rates don't gather data on them separately.

²⁵ All member states of the European Union except for Croatia, who joined in 2013.

5.1.3 Control

Although the evidence for a generational cleavage with regards to education preferences are mixed, and varies considerably by country, age is still an important factor to take into account (cf. Sørensen, 2013 and Busemeyer et al., 2017a). As Busemeyer et al., found a significant impact of educational institutions with regards to VET vs. general spending, the ratio of students attending upper secondary VET education will also be included, as a measurement of the importance of VET in that country (2011, also see: Iversen & Soskice, 2001; Cusack et al., 2006). This data is taken from UNESCO Institute for Statistics and is measured as a number between 0 and 100, where 0 is percent in upper secondary VET and 100 is 100 percent. In addition to this, education will be included where it is coded according to ISCED 97, meaning that 0 corresponds to ISCED 0-2 (pre-primary education to lower-secondary education), 1 to ISCED 3-4 (upper secondary education to post-secondary non-tertiary education) and 2 to ISCED 5-6 (first and second stage of tertiary education). Lastly, gender will be included and coded as 0 being male, and 1 female.

5.1.4 Interaction effects/variables

An assumption made in this thesis is that individuals will prefer VET over general education in times of high youth unemployment since it offers a solution to the problem, with minimal costs for the individual. A model always has to simplify reality in order to capture parts of it, and it is of course reasonable to expect that the effect of high youth unemployment will affect individuals differently, implying causal heterogeneity. One already discussed is income, seeing how the causal mechanisms is assumed to be material self-interest. This means that it is more rational for high income individuals to prefer VET over general education, or that youth unemployment has an interaction effect with income, in the sense that the effect should be larger the higher youth unemployment is.

Consequently, it would be valuable to test the interaction effect of income on youth unemployment, however the Eurobarometer 75.4 does not include a straightforward and weighted question about income. Albeit far from perfect, income will be operationalized according to the question: “During the last twelve months, would you say you had difficulties to pay your bills at the end of the month...?”. This question is clearly not as straightforward as just getting a pure number of someone’s income, and thereafter (for example) divide individuals in income quartiles per country. This would be preferable to this question, which seemingly intends to capture the economic risk of the individual. However, in some ways the question does have its benefits, as it takes a subjective component into account, and captures the relationship between income and expenditure of the respondent. The answers of this question are “Almost never/never”, “From time to time”, and “Most of the time”, however, for simplicity this will be coded dichotomously as 1 being “Almost never/never” and 2 being “Sometimes/Most of the times”. In addition to this, it is reasonable to think that individual level assumptions or attitudes about VET have an effect on the dependent variable, mainly with regards to how individuals think VET affects your chances of being employed, or in general the quality of VET in your country. Therefore, the question “Do you think that people who completed their vocational education and training are more likely or less likely to find a job after their studies than people who completed their general secondary or higher education?” will be

included, as it addresses the suggested mechanism. The answers are coded as 0 being “Less likely” and 1 being “More likely”. In addition to this, the question “And do you think that vocational education and training has a very positive, fairly positive, fairly negative or very negative image in your country” will also be included to check the mechanism. Unlike the other question, it is measured using the likert scale and is dichotomized so 0 = negative, and 1 = positive. It is proposed that the effect of perception of VET on the dependent variable is contingent upon the levels of youth unemployment in the country. These two interaction terms can together be summarized as expressing the theoretical proposition that the effect of income on educational policy preferences are contingent on the levels of youth unemployment in that country, as well as the effect of your perception of VET on educational policy preferences varies similarly.

5.1.5 Method

In order to analyse my data, I will be using a multilevel logistic regression. First, as the dependent variable is binary, a logistic regression is preferred to a linear one where the dependent variable would be continuous. Secondly, as my data is clustered in an hierarchical way, i.e. individuals clustered under countries, a multilevel model is needed in order to account for the relationship between the data at different levels. The clustering of data introduces an assumption of correlation or dependence between respondents nested within the same cluster, which is basically the foundational assumption of this thesis. Although individuals differ in terms of educational policy preferences in foreseeable ways across countries (e.g. some micro-determinants have validity in different educational systems), individuals within one country tend to have similar opinions as they have been shaped in a similar environment. Failing to take this nested structure into account can lead to an underestimation of the standard errors for the variables of interest, if the clustering is associated with the independent variable (Moulton, 1990). For a long time, macro and micro level differences existed in “separate worlds”, however, a new bulk of research has begun exploring the interaction between them. For example, Anderson & Singer explores how income inequality (at the macro level) affects how people trust public institutions and how they view the functionality of the political system (2008 : 565). However, the tools used to analyse them have been advancing rapidly, and with it, diverging opinion on how to do it, specifically, how many observations are needed on each level to do meaningful statistical analysis? In this case, it will be a two-level hierarchical model, where individuals ($N = 13174$) are at level 1 and countries ($N = 27$) are at level 2²⁶. As it is obvious that the number of people outnumbers the number of countries, the question becomes: how many countries do we need for multilevel modeling? This question is also asked by Stegmueller, who analyses how a change in the number of countries affects the bias of the estimated effect (2013). He concludes that estimation of average effects are only biased to a limited extent when the number of countries exceed 20 countries, which bodes well for this analysis. However, he also concludes that for cross-level interactions the picture is quite darker. Even with 20 or more countries it can be hard to get an unbiased estimation of the effect. Seeing that the research question of this thesis relates to a direct effect and further analyses of cross-level interactions are only included in order to test some

²⁶ Pertaining to Anderson & Singer, it should be noted that technically individuals are nested in “cross-nationally variable macro environments”, which for them is levels of income inequality. Although it is easier to talk about countries, in the model the countries will simply be stand ins for different variable macro environment with youth unemployment being the focus (ibid : 266).

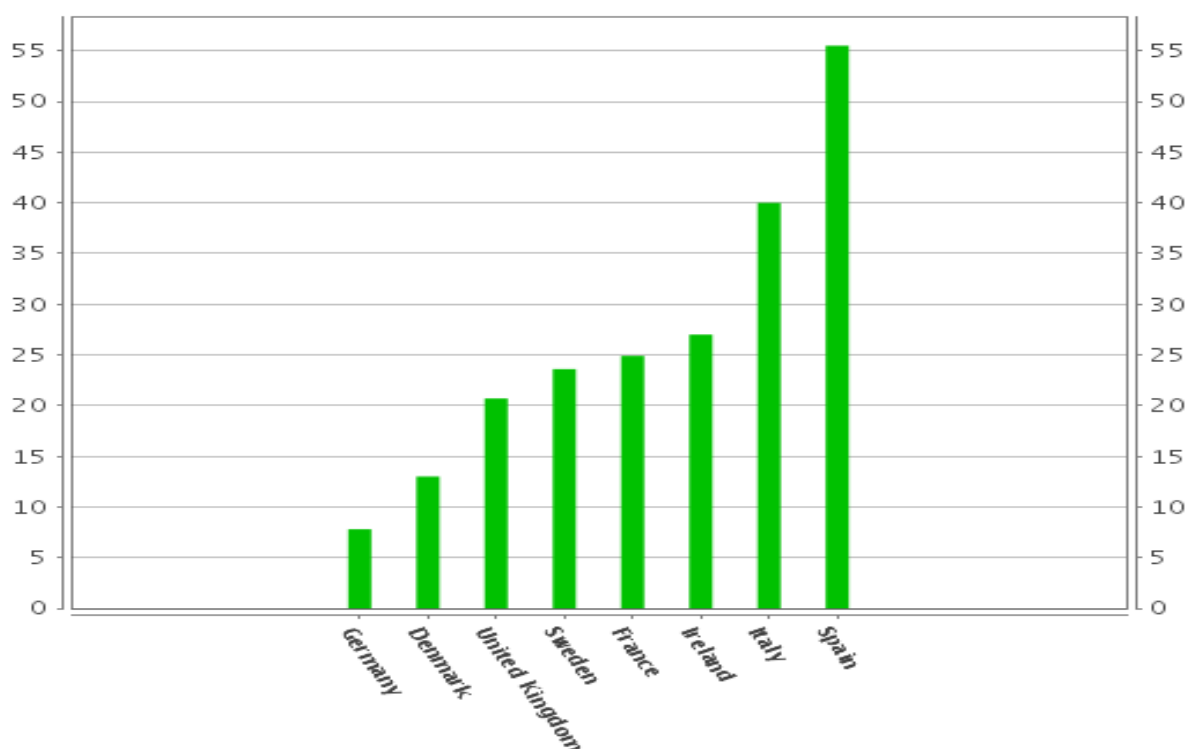
assumptions about the contextuality of the mechanism at hand, it means that the proposed method is suitable, albeit the estimations for cross-level interactions should be viewed with a bit more carefulness.

5.2 Dataset and variables - INVEDUC

The INVEDUC data comes from the survey done within the INVEDUC project, which aims to gather and analyze citizen's preferences in eight European countries. It was gathered using computer assisted telephone interviews (CATI) and has a similar number of observations per country as the Eurobarometer (approximately 1000 per country), even down to having additional ones for Germany (1500) and the UK (1300).

5.2.1 Independent variable

Turning to the INVEDUC dataset, the dependent variable will be taken from the same source as for the Eurobarometer test (i.e. Eurostat), both for consistency and for simplicity. However, the downside of the INVEDUC dataset is the reduction of countries compared to Eurobarometer as it drops from 27 to 8. This is of course a problem since we only have eight distinct values on our independent variable and the usefulness of multilevel modelling decreases when the second level observations are small.



Graph 2: The percentage of individuals aged 18-24 unemployed in the selected countries. Data from 2014. Source: Eurostat.

5.2.2 Dependent variable

Although the lack of countries in the INVEDUC dataset is a definitive weakness with regards to the research question, its questions are a perfect operationalization of the dependent variable. The operationalizations are more straightforward, and the dataset includes several measures of educational policy preferences. However, as the dataset also includes a similar question²⁷ to the one posed in the Eurobarometer survey, the INVEDUC part of the analysis will start with logistic regression analysis between this question and the ones strictly about educational policy preferences as well as controls. This allows this thesis to test the earlier proposition that the operationalization of educational policy preferences in Eurobarometer is valid.

The INVEDUC data allows you to discern between different educational sectors, and also attach different downsides to each increase. For example, the survey asks if the respondent supports increased spending on vocational training and education, as well as if they accept tax increases in order to pay for this. The survey also includes different drawbacks, such as: raising the debt, cut back on spending for pensions and unemployment benefits. Not surprisingly, support decreases when any of these constraints comes into the picture. However, as the focus of this thesis is not budgetary trade-offs, the regular question without drawbacks as well specific questions with drawbacks can be included, as it is the country effects that are of interest. It can be argued here that this decreases its external validity *if the goal was to test the effect of opinion on policymaking*, but since the focus is on how VET is preferred to higher education, the results still speak to my research question. Therefore, the questions of interest are²⁸: “Spend more/less, education: Vocational education and training”, “Government increase spending for one part of the education”, and “Encourage young persons to pursue vocational education and training rather than university and academic higher education”²⁹. The second question forces the respondent to make a choice between different sectors of the government, however it does include pre-school and general school education, meaning many answers won’t be valid for the question of this thesis. Both forces the respondent to give up their preference with regards to VET vs general education, albeit the other categories mean the answers should be viewed carefully. The answers for the second question, besides the ones already mentioned, are: “Universities and other higher education” which will be coded as 0, and “Vocational education and training” coded as 1. For the former question, the answers range from “Spend much

²⁷ The difference is that the INVEDUC question also adds “Think of a young person with average grades in school” before the question, and also separates the VET portion of the question into “School based vocational education” and “Firm-based apprenticeship”. This thesis argues that since “average grades” is what the individual in the Eurobarometer are most probable to have in mind when asked the question, this should not matter too much. The question will therefore be coded as 0 being academic education, and 1 being VET.

²⁸ The questions should be read with the preface “The government should...”.

²⁹ This question is special in the sense that it does not entail a spending increase as the consequence of agreeing, but instead it can be seen as the political extension of the dependent variable in the Eurobarometer part of the analysis. This is important since it’s of course a possibility that someone would recommend VET personally, but does not want the government to do this. An example would be a pro VET libertarian, who does not want the government to encourage young people because of his/hers preferences for free market forces and rejection of government intervention.

more” to “Spend much less”³⁰, with “Spend much more” and “Spend more” coded as 1, and “The same”, “Spend less”, and “Spend much less” as 0. The third question will be coded as 0 being “encourage university/academic higher education”, and 1 being “encourage VET”. Lastly, the question “Would you support a new tax to finance additional investments in the area of VET” will be included, with “No” being coded as 0, and “Yes” being coded as 1. As the research question looks at both country effects of youth unemployment and how it affects preference of VET *over* general education, the first and the last question will be measured against the same question that asks whether or not the respondent would support increases in general higher education. They are coded the same as their VET counterparts.

5.2.3 Control variables

The INVEDUC data allows for more precise control of potential confounders as many more demographic variables exist in it. Owing to the analysis performed by Bussemeyer & Garritzmann on preferences between VET and general education, the analysis will follow their inclusion of what they describe as a “standard set” of control variables, with some exclusions (2017b : 378). These include age (coded in age groups: 0 being 0 to 35, 1 being 35-50, and 2 being over 65), gender (with 0 being male, and 1 being female), living in a household with at least one child (0 coded as without, 1 being as with³¹), highest level of education obtained (1 being basic education, 2 being upper secondary general education, 3 being upper secondary vocational education, 4 being post-secondary/non-tertiary, and 5 being tertiary) household income categorized in quantiles by country (1 being the poorest, 5 being the richest), and lastly, ideological positioning on a left to right scale (0 being left and 10 being right).

5.2.4 Method

Although the nested structure of the data suggests a similar statistical method as for the Eurobarometer data, there’s unfortunately not enough countries to yield the required amount of observations at the second level. Another way to analyze the data would be to pool all the data and perform a logistic regression utilizing country dummies and country clustered standard errors to gauge country-fixed effects, thus following what Bussemeyer & Garritzmann did in their paper (2017b). This way, it would be possible to control for various demographic factors in different countries and thereafter see what the difference is between countries with high and low unemployment, basically treating countries as macro-level variables which post estimation can be

³⁰ With “Don’t know”, “The same” and “No answer” also included as options, however for this analysis they will be dropped.

³¹ It is worth noting that the variable measuring this captures the amount of children living in the household, and is not coded binary initially. However, from a perspective of material interest, the biggest difference should come from not having a child and having one, and not between having one or two. The reason for this is the assumption that having a child extends what can be called your “unit of rationality”, i.e. for who or what you make choices that maximize your material gains, and going from one child two to two children does not alter this as much as going from zero to one.

compared to youth unemployment figures. As this would make it possible to gauge the relative effect of being inside a country with a specific youth unemployment figure, this estimation method will be used for the analysis of the INVEDUC data³². However, a regular logistic regression will first be performed to see the correlation between recommending VET over general education and educational policy preferences.

6. Analysis

In this section, the Eurobarometer results will first be presented and thereafter the results for the INVEDUC data. They will also be discussed more substantively before being summarized, and thereafter their implications for the hypotheses will be addressed.

6.1 Eurobarometer

The first step when specifying a multilevel model is calculating the intraclass correlation coefficient (ICC) by running a null model, i.e. a model excluding predictor variables. This way, one can calculate the degree of homogeneity of the treatment effect (i.e. youth unemployment) across different clusters (i.e. countries). Simplified, this indicates if a multilevel model, or a single-level model (value close to 0 or negligible) is more appropriate (Sommet & Morselli, 2017). In this case, the ICC is calculated to be approximately 0.103, which indicates that around 10% of the difference in outcome is attributed to between country differences. Albeit slightly low, following the best practice recommendations³³ of Aguinis et al., it is still substantive enough to warrant a multilevel model (2013). It is also worth pointing out that as the main effect suggested in this paper is one that relies on the assumption that clusters matter (in the way that country-specific factors matter), this both signals that the proposition is true, and that the effect from the suggested factor is probably quite small, if there at all. Turning to the main results from the statistical analysis, Table 1 shows the output of the multilevel logistic regression in odds ratios. Model 1 shows micro-level determinants, and the results are much in line what has previous been found regarding individual characteristics and preferences between VET and general education. The single biggest predictor that can be deduced from someone's individual background is experience with VET, as it increases the chance of recommending VET with 51%. This is much in line with the the socialization theory advanced earlier and the connection between your own educational background and your preferences. This is also evident when one studies the impact of further education, which correlates negatively with preferring VET. Not surprisingly, both variables that are included to gauge the subjective feelings of the respondent towards VET correlates positively with preferring VET. Notably, it shows the connection between believing that VET meets the needs of the labor market and recommending it as a suitable career path for someone. This is the biggest predictor, as individuals who believe VET are better at providing jobs are 138% more likely to recommend VET to someone. This is also in

³² Another possible way would be to utilize cluster-robust standard errors. As a robustness check this is done and the output of the regression can be found in appendix 2. As is clear, country clustered standard errors are to prefer.

³³ This is supported twice in their paper. Firstly, when surveying review articles on the subject they report three different spans that are usually reported in articles. Two of these include 0.1, and the third one has the lowest cut off value at 0.15, meaning that the average span still includes 0.1. Secondly, when they themselves calculate an example value of ICC, they report it to be 0.117, which they argue is enough to warrant a multi-level model as it implies clusters matter.

Table 1: Preference for VET over general education. YU = Youth unemployment, VE = Vocational enrollment.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Micro	Macro	Micro/Macro	Bills	VET	Job	Full
Micro							
Gender	0.832*** (0.0315)		0.826*** (0.0318)	0.827*** (0.0319)	0.826*** (0.0318)	0.824*** (0.0318)	0.826*** (0.0318)
Age	1.007*** (0.00108)		1.007*** (0.00110)	1.007*** (0.00110)	1.007*** (0.00110)	1.008*** (0.00110)	1.008*** (0.00110)
Bills	1.203*** (0.0336)		1.120*** (0.0507)		1.198*** (0.0507)	1.120*** (0.0510)	
Education	0.674*** (0.0198)		0.660*** (0.0199)	0.659*** (0.0198)	0.660*** (0.0198)	0.660*** (0.0198)	0.659*** (0.0198)
View VET	1.220*** (0.0562)		1.218*** (0.0569)	1.218*** (0.0569)		1.223*** (0.0571)	
Likely job	2.383*** (0.107)		2.495*** (0.115)	2.499*** (0.115)	2.500*** (0.115)		
Vet exp.	1.509*** (0.0608)		1.507*** (0.0618)	1.506*** (0.0618)	1.508*** (0.0619)	1.511*** (0.0620)	1.513*** (0.0620)
Macro							
YU		0.973 (0.0148)	0.998 (0.0137)	0.996 (0.0137)	0.993 (0.0136)	0.972* (0.0133)	0.964** (0.0132)
VE		0.978* (0.0103)	1.007 (0.00948)	1.007 (0.00949)	1.006 (0.00944)	1.006 (0.00993)	1.006 (0.00941)
Interaction							
1.Bills x YU				1.007*** (0.00177)			1.008*** (0.00166)
1.View VET x YU					1.007*** (0.00180)		1.007*** (0.00182)
1.likely Job x YU						1.036*** (0.00186)	1.036*** (0.00186)
<i>Individuals</i>	13174	12808	12808	12808	12808	12808	12808
<i>Countries</i>	27	27	27	27	27	27	27
<i>Country</i>							
<i>Intercept</i>	0.4543	12.36	0.3949	0.4957	0.4644	0.3642	1.201
<i>Variance</i>	0.3364	0.4101	0.3351	0.3355	0.3326	0.3889	0.3658
<i>intercept</i>							

Exponentiated coefficients; Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

line with what the ICC indicated and shows that although the operationalization of the dependent variable is far from perfect, in certain ways, the responses follow the findings of earlier that are more specifically about policy, when it comes to micro determinants.

Looking at model 2, where macro variables are introduced, only enrollment of vocational students achieves statistical significance, and surprisingly it finds a negative relationship between having a high enrollment rate and recommending VET over general education. Although it is hard to speculate, it might mean that there's a saturation effect and that once enrollment reaches a specific value, people are less inclined to recommend VET over general education. meaning that the null hypothesis Can not be rejected. This means that the model fails to establish a relationship between youth unemployment and recommending VET over general education. Model 3 is the macro and micro variables together, and does not differ significantly from model 1 and 2. The results from model 4, 5 and 6, where the interaction terms are introduced, are plotted in Figure 3, 4 and 5 respectively. Figure 3 shows the interaction effect in model 4, where we see that higher youth unemployment has a positive effect on the relationship between having a hard time paying your bills, and preferring VET. Although the interaction effect is quite small in substantive terms it is still significant, and the average marginal effect when youth unemployment is around 10% is predicted to be about three times higher when youth unemployment is at 40%.

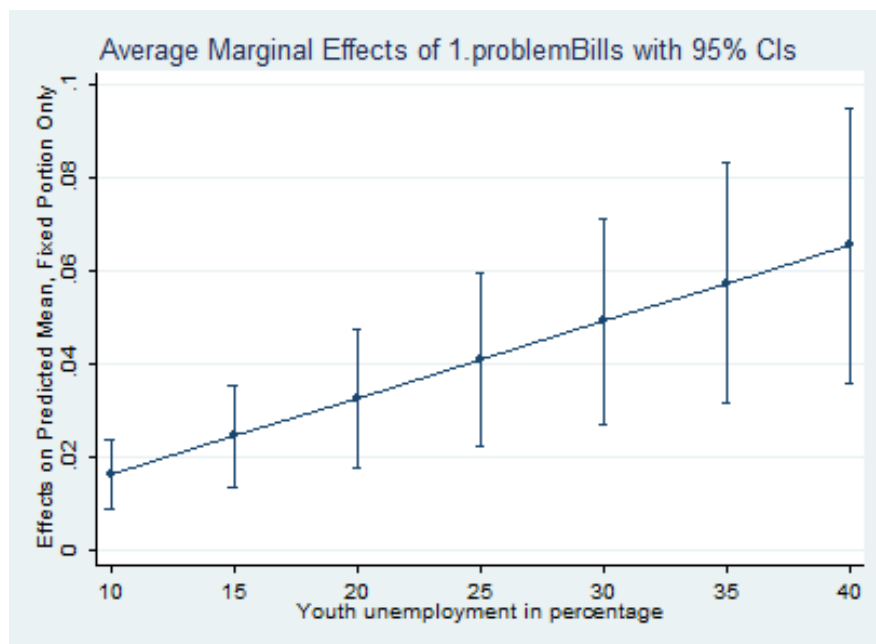


Figure 3: The moderating effect youth unemployment has on the relationship between having problem paying bills and recommending VET over general education.

Turning to model 5, the moderating effect youth unemployment has on the relationship between how an individual thinks VET is viewed in their country and recommending VET over general education is plotted in 4. As the regression table hinted at, this is very much in line with Figure 3 and the results are very similar here.

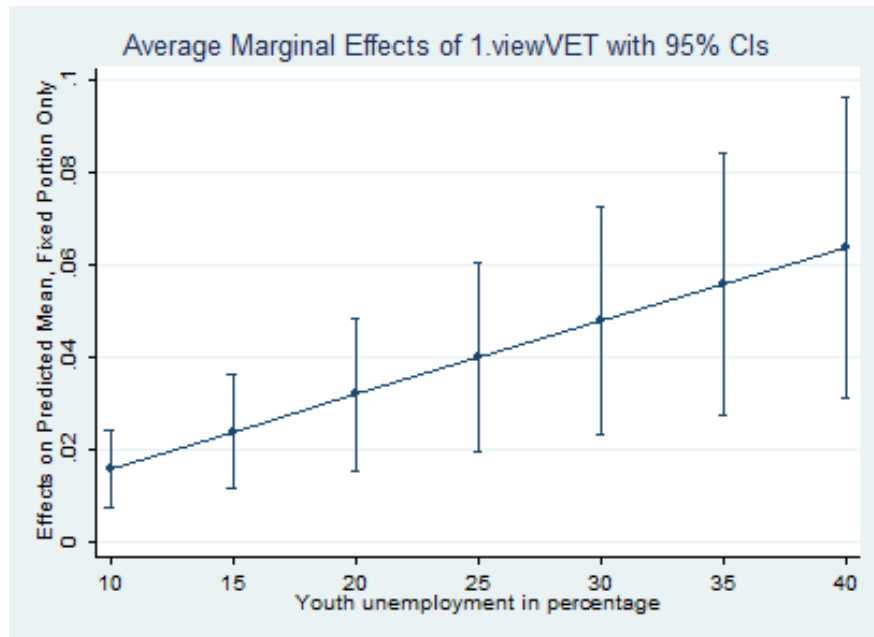


Figure 4: The moderating effect youth unemployment has on the relationship between believing VET has a positive impact in your country and recommending VET over general education.

Lastly, Figure 5 shows how youth unemployment moderates the relationship between thinking you are likelier to get a job by attending VET compared to general education, and also recommending VET over general education. Here the average marginal effect is quite higher than in the previous figures, and it's more than a 200 % increase in the positive effect between a youth unemployment rate at 40% and one at 10%. It is worth pointing out the increase in confidence interval associated with higher youth unemployment figures, which makes it harder to put pure numbers on the increase, however the trend is measurable. This shows the connection between VET and labor market needs, as an individual who has a positive view of VET (and how it affects the labor market positively) are more and more likely to recommend it when youth unemployment rises. This can be seen as an indicator on how macroeconomic effects can increase the demand for a certain policy, or in this case, how youth unemployment can increase the likelihood that someone recommends VET over general education if they already hold a positive view of VET on the specific characteristic that counts for the macroeconomic condition.

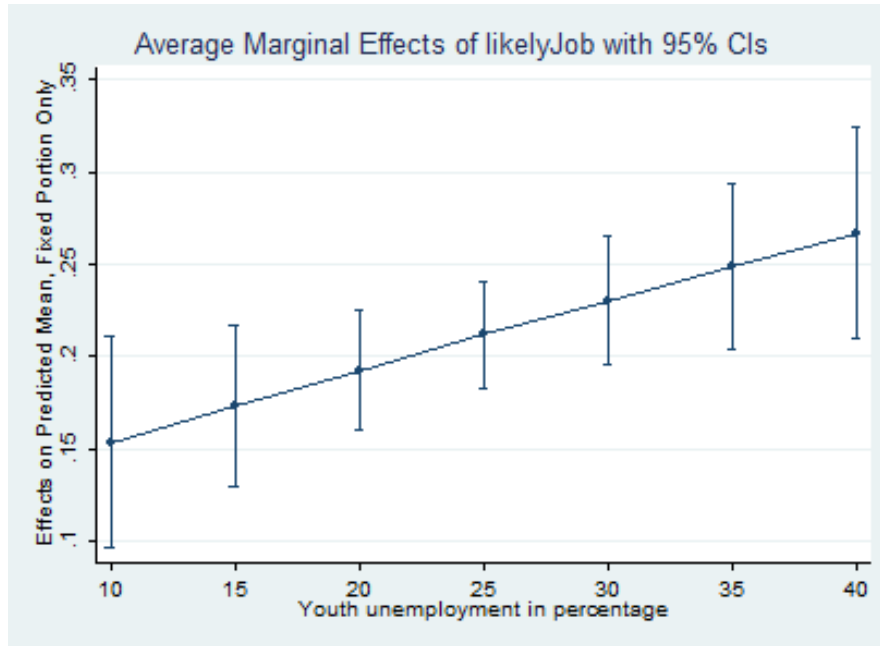


Figure 5: The moderating effect youth unemployment has on the relationship between believing that VET increases your chance of getting a job compared to general education, and recommending VET over general education..

6.2 INVEDUC

Firstly, the correlation between recommending VET over general education as a career path and wanting the government to prioritize that area in education is shown in Table 2 with the results given in odds ratios. Model 1 shows the probability between accepting spending increases in the VET sector and recommending VET for a newly graduate person, whereas model 2 shows the same but for the probability of someone accepting spending increases for general higher education. Not surprisingly, it shows that someone who is willing to spend more on VET is also likelier to recommend VET, and the opposite is true for someone who is willing to spend more on general higher education. If someone recommends VET they are approximately 60% more likely to support increases in VET funding rather than cutbacks, whereas one who recommend higher education is approximately 70% more likely to advocate for spending increase in that sector. In model 3, the predictor variable is a forced choice scenario between spending money on only one area, with the options being VET or general higher education. The results indicate that an individual is 400% likelier to recommend VET if they also think that the government should prioritize that education sector. Lastly, model 5 shows that if someone wants the government to encourage VET over general higher education, they are approximately 311% likelier to recommend VET themselves. All of this indicates a substantive correlation between recommending VET over general higher education to someone and also favoring VET when it comes to policies.

Table 2: The relationship between recommending VET over academic education and policy preferences.

Dependent variable	(1)	(2)	(3)	(4)
Age	1.342*** (0.0726)	1.414*** (0.0628)	1.228** (0.0856)	1.244*** (0.0654)
Gender	0.845 (0.0884)	1.021 (0.104)	0.938 (0.126)	0.985 (0.0982)
Have kids	0.824 (0.0857)	0.833 (0.0842)	0.916 (0.121)	0.789* (0.0788)
Education	0.935 (0.0330)	0.933* (0.0327)	0.992 (0.0449)	0.945 (0.0322)
Ideology	1.059** (0.0222)	1.033 (0.0215)	1.042 (0.0283)	1.007 (0.0206)
Income	1.041 (0.0395)	0.993* (0.0376)	0.977 (0.0480)	0.999 (0.0364)
Spend more VET	1.616** (0.298)			
Spend more HE		0.296*** (0.0628)		
Spend on sector			5.040*** (0.664)	
Gov. encourage VET				4.116*** (0.397)
<i>Number of individuals</i>	3207	4773	2098	3725

Exponentiated coefficients; Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Turning to the logistic regression with country dummies, the results for the first question (i.e. spend more or less on VET) can be seen in Figure 6³⁴. It shows the average marginal effects of living in a specific country, while controlling for demographic factors, for the question “Spend more or less, education: Vocational education and training”, and the same question for general higher education/universities. For Figures 6 to 9 the figures shows preferences for VET over general education (i.e. the left plots in Figure 6 and 9), the expected pattern is that the countries on top have the highest marginal effects and the ones at the bottom the lowest, since they are ordered according to their youth unemployment rates, with the lowest (Germany) at the bottom and highest (Spain) on top.

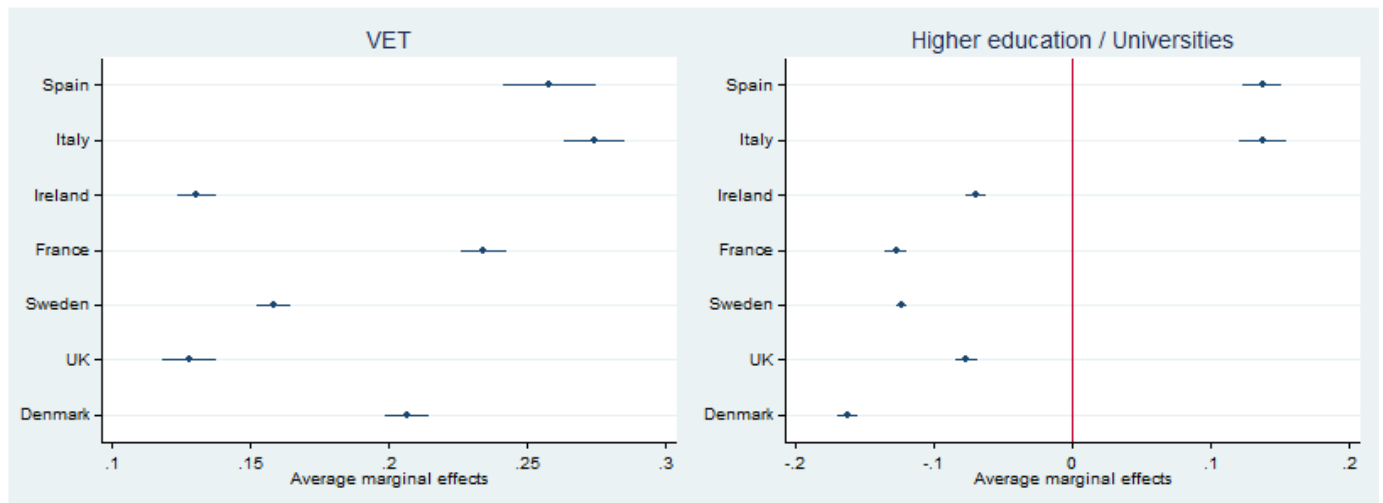


Figure 6: The country average marginal effects (country fixed-effects) for respondents answering whether or not they want to invest more or same/less in VET vs. higher education / universities, and their 95 percent confidence intervals. Germany is used as the reference category because it has the lowest demand for additional VET spending.

There's a slight pattern in the graph to the left that indicates that countries with the highest levels of youth unemployment (Spain, Italy) are also the ones where respondents are more likely to prefer more investments. This is also in line with the results for the same countries in the graph to the right, where they exhibit relatively high levels of accepting of spending increases compared to other countries, and they prefer increased VET spending over higher education / universities spending. However, it is clear that Denmark is an outlier both if we look at its value in the graph to the left and compare it to the hypothesis 1, but also taking the difference between the effect in both graphs into account. Denmark should have a lower demand for VET in general, as well as a smaller difference between preference for VET and higher education / universities. This point is valid for France as well, which has the biggest difference in average marginal effects, something rather expected from Italy or Spain. Ireland is also an outlier in the left graph, and according to the theoretical expectation it shows the effect that Denmark is proposed to have. A possible explanation for Denmark's surprisingly high levels of demand might be because of the timing of an agreement between all the

³⁴ The full regression table for Figure 3 to Figure 6 can be found in Appendix 1.

major parties in February 2014 relating to the restructuring of VET. This coincided with a big debate before where the perceived faults of VET were discussed, which could influence the behaviour of voters because of the salience of the topic (Danish Government, 2014). However, this explanation would of course have to take into account the salience of the topic in all other countries before the respondents were asked about their preferences, which is outside the aim of this thesis. Nonetheless, if this pattern is apparent across other questions that relate to preferences for VET, albeit not as good of a operationalization as this question, it would indicate that youth unemployment have an effect of preferences for VET. Figure 7 shows the results for the question where respondents were forced to choose between one educational sector that they wished the government to spend more money on, with the options VET and universities/higher education as the only options.

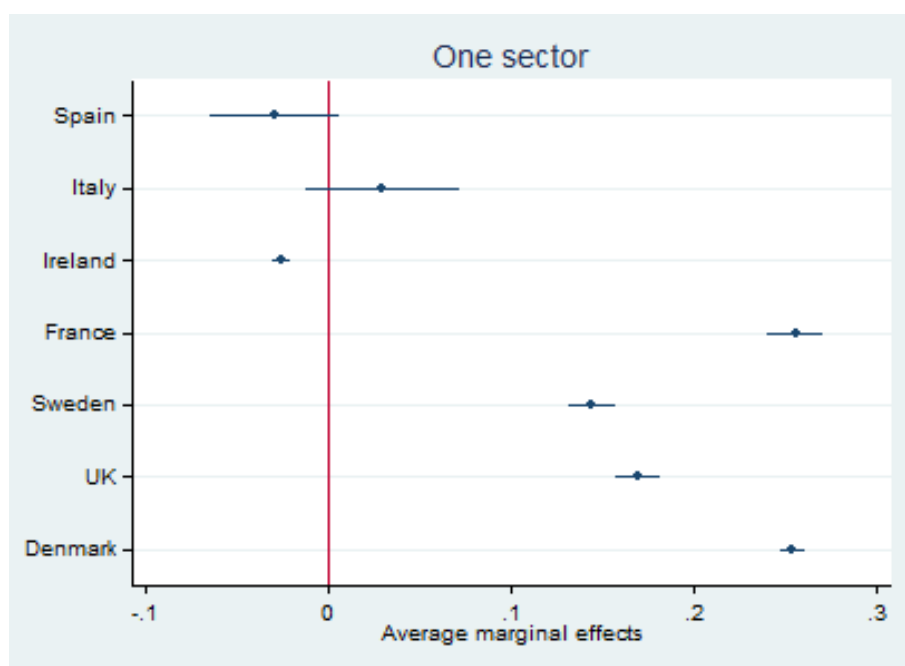
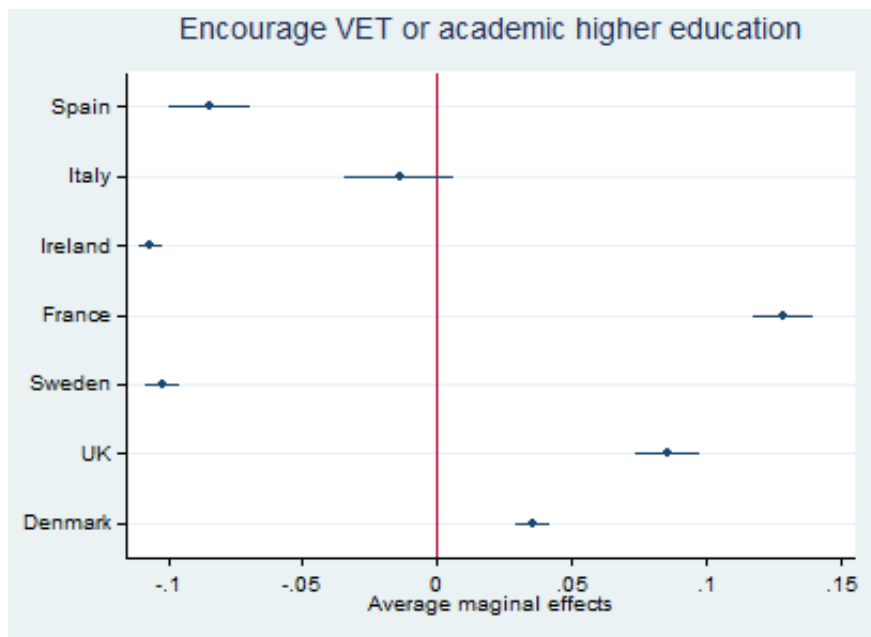


Figure 7: The country average marginal effects (country fixed-effects) for respondents answering whether or not they want to invest more in VET or general academic education, and their 95 percent confidence intervals. Germany is used as the reference category for consistency, however it also has the lowest effects for this question. Italy and Spain both fail to reach statistical significance ($p=0.171$ for the former, $p=0.097$). Even if we exclude these countries it's clear that it's not the expected pattern..

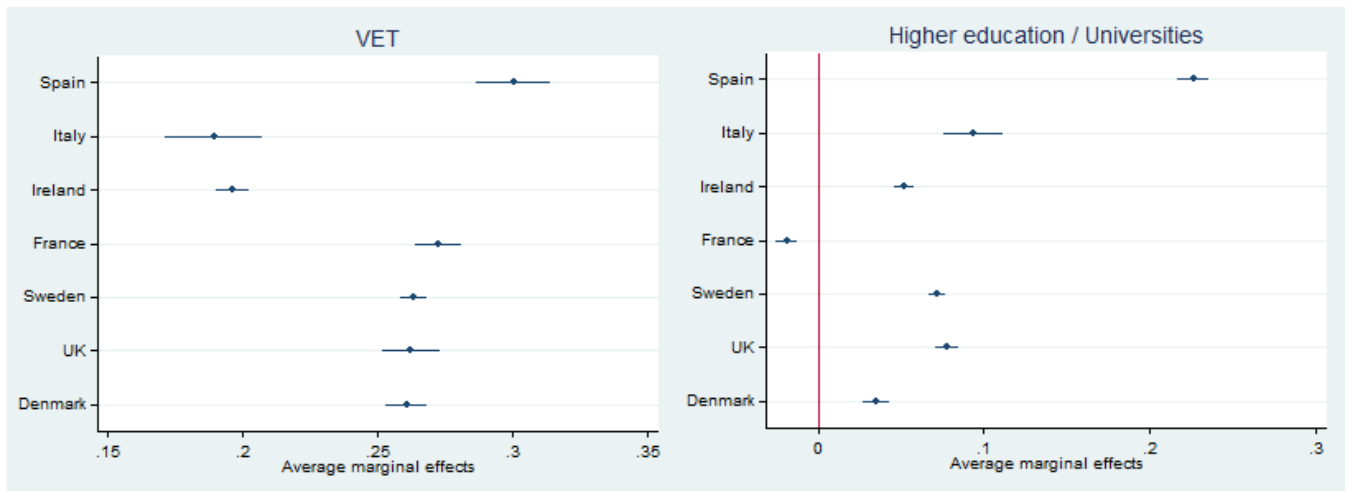
The slight pattern that could be seen in Graph 6 is even harder to see in Graph 7, however as this question also included other categories than VET and Universities/Higher education, it should be viewed carefully. The overlapping confidence intervals of the four countries at the bottom makes it hard to draw any conclusion about which country has the biggest average marginal effect, and Italy and Ireland are clear outliers according to the theoretical expectation. However, as Spain and Italy have p-values slightly above the cut-off value of 0.05, Moving on to the question about what the government should recommend with the options being VET or academic higher education, the results can be seen in Figure 8. Here it is obvious that living in countries with high youth unemployment does not have an effect on individuals when it comes to wanting the government to

encourage VET over academic higher education. Conversely, the graph seems to indicate that countries with lower youth unemployment are more likely to think that the government should encourage VET over general academic education. Although the question is close to the one in the Eurobarometer survey, albeit it asks for the individuals policy preference instead of personal recommendation, it is a bit different than spending questions. If VET is perceived to not be working in a country, and it has high youth unemployment, it might be rational for an individual to demand more spending in that area to fix it. However, that individual might not want the encourage to recommend VET over general academic education *ceteris paribus*, as it would just make the problem worse.



Graph 8: The country average marginal effects (country fixed-effects) for respondents answering whether they believe the government should encourage VET or academic higher education, and their 95 percent confidence intervals. Germany is used as the reference category for consistency, however it also has the lowest effects for this question. Italy fails to reach statistical significance in this model ($p=0.173$).

Lastly, Graph 9 shows the country average marginal effects for the last question, namely if one is willing to support more spending on VET or general higher education, even if it is financed through a tax increase. The graph to the left fails to reproduce the expected pattern, as Italy and Ireland exhibit much lower support than Denmark, the UK, Sweden and France, even though both of the countries have higher youth unemployment rates than all of them. Comparing both graphs, one sees that in all countries except for France, there's a larger support for a tax increase to fund increased VET spending. However, the relationship is not according to what is expected, as the four countries in the bottom have the biggest difference in support, even though they have the lowest youth unemployment figures.



Graph 9: The country average marginal effects (country fixed-effects) for respondents answering whether or not they want to finance new spending in VET or higher education / universities with a new tax, and their 95 percent confidence intervals. Germany is used as the reference category for consistency.

6.3 Summary analysis

The findings falsify hypothesis 1, as it is evident that higher youth unemployment does not correlate with an increased preference for VET, nor does VET have bigger support in countries with higher youth unemployment figures. As the Eurobarometer part of the analysis failed to find a significant effect, the INVEDUC part of the analysis serves as the main motivation for falsifying hypothesis 1. Regarding hypotheses 2 and 3, there's some evidence that seems to support the hypotheses, albeit the effects are quite small for hypothesis 3. For hypothesis 3, it is evident that individuals who believe that VET increases your chances of getting a job compared to general education are more likely to be affected by youth unemployment with regards to their educational policy preferences. Therefore, this thesis fails to falsify hypotheses 2 and 3.

7. Conclusion

On the topic of educational policy preferences, there's still much to be said. Although new surveys and increased scholarship on the topic pushes the field forwards, most existing scholarship has focused on micro determinants, and have neglected macro level explanations as a possible key to the puzzle. As educational policy are increasingly becoming more important as a policy tool for various social problems, it is reasonable to assume that individual's preferences adapt in order to support the policies that will lead to the least amount of negative repercussions for themselves. Therefore, educational policy preferences are assumed to be responsive to shifts in macro economic contexts if they can have a personal effect on people.

This thesis set out to test this assumption utilizing two different datasets, and looking specifically at the case of youth unemployment and preferring VET over general education in a policy setting. The first part of the analysis which utilized the Eurobarometer dataset looked specifically at the direct

effect of youth unemployment on recommending VET over general education across 27 countries, as well as how youth unemployment interacts with micro-level relationships. The direct effect of youth unemployment on preferring VET over general education was studied twice, first indirectly by utilizing the Eurobarometer dataset and multilevel logistic modelling, and secondly by comparing the country fixed effects holding demographic factors constant in the INVEDUC part of the analysis. The Eurobarometer asks the respondents not directly about their policy preferences, but however it does give an indication about the attractiveness of VET compared to general education. This part of the analysis fails to find evidence for the hypothesis that youth unemployment has a direct effect on educational policy preferences, however it does find evidence for its moderating role in micro-level relationships between preheld perceptions of VET and recommending VET over general education. On this topic, the analysis shows that higher youth unemployment strengthens the positive association between having a favorable view about VET and its ability to create job skills, and recommending VET over general education. Regarding the research question, this part of the analysis failed to find a direct answer to the question, however it was able to show how youth unemployment can have a moderating effect.

The second part of the analysis utilized the INVEDUC dataset, which although having too few countries to perform a multilevel logistic regression, had very detailed questions which were perfect for the research question of this thesis. The first part of the analyses confirmed the choice of operationalization for the Eurobarometer part of the analysis, as it showed how it correlated positively with many policy questions that it intended to be a proxy for. The second and main part of the INVEDUC analysis was a logistic regression with country dummies and country clustered errors on four policy questions relation to the research question, where youth unemployment wasn't included as an independent variable but rather used postestimation to see if patterns formed according to hypothesis 1. Although there were some slight patterns visible on the first question (Figure 6), the overwhelming evidence points to the fact that there's no correlation between high youth unemployment and preferring VET over general education. This, together with the inconclusive results from the Eurobarometer analysis, shows that there's no discernable effect of youth unemployment on educational policy preferences, and specifically on whether or not the respondent prefer VET over general education. Therefore, the research question posited in the beginning of this thesis has been answered.

This thesis posited macro effects as something which has a direct effect on individuals preferences, something that earlier research neglected in favor of macro-explanations stemming from feedback effects, often from the educational system at hand. As this thesis fails to find a direct effect from youth unemployment to educational policy preferences, but finds an effect on how it moderates micro-level relationships, it might be more fruitful for future research to focus more on how micro determinants are shaped by the macro context. Assuming causal heterogeneity is of specific importance when one takes into account the distinctive national character of educational systems, although this might be of less importance in the future if globalization and the EU³⁵ keeps having homogenizing effect on them. In addition, international comparative social surveys becomes more

³⁵ For example through similar endeavors like the Bologna process.

sophisticated and more encompassing, hopefully future research can combine advanced statistical methods with a high internal validity on the dependent variable, taking into account the different educational sectors. For now, this thesis shows a two step solution to how these problems can be approached in a way that utilizes the best parts of existing surveys on the subject.

Lastly, while doing research for this thesis it became evident that there is a lack of qualitative and experimental approaches to the subject. The field could gain more by having a firmer micro foundational theory to ground itself in, as earlier works on social policies seem to have different mechanisms than educational policy. Whilst waiting for more comparative international surveys covering education, a focus could be on understanding the connection between social position, new information, and educational policy preferences. A qualitative approach with in-depth interviews might be able to uncover the heuristic methods that individuals use when they are presented with new information regarding the connection between education and social phenomena, and see how this relates to their policy preferences and social position. As education are taking a more prominent role in combating social problems and have a huge impact for the wellbeing of individuals, understanding what causes support for one policy over another is paramount if education is going to be a useable policy tool. In addition to this, the eurocentric focus of comparative social surveys severely limits the external validity and universality of claims, and future research should try to fill in empirical gaps from other parts of the world besides Europe.

For now, it seems that Wilensky's proposition that "education is special" is correct, however hopefully we are on the cusp of knowing exactly how special it really is. And by understanding that, the integration of education policy into general welfare policy can be done more successfully.

References

- Aguinis, Herman, Gottfredson, Ryan K. and Culpepper, Steven A. 2013. “Best-practice recommendations for estimating cross-level interaction effects using multilevel modeling.” *Journal of Management*. 39, 1490–1528.
- Ansell, Ben W. 2010. *From the Ballot to the Blackboard: The Redistributive Political Economy of Education*. New York: Cambridge University Press
- Anderson, Christopher J., and Matthew M. Singer. 2008. “The Sensitive Left and the Impervious Right: Multilevel Models and the Politics of Inequality, Ideology, and Legitimacy in Europe.” *Comparative Political Studies* 41(4/5):564–99
- Armingeon, Klaus and Bonoli, Giuliano. 2006. *The Politics of Post-Industrial Welfare States: Adapting post-war social policies to new social risk*. London/New York: Routledge
- Blekesaune, Morten. 2007. “Economic Conditions and Public Attitudes to Welfare Policies” *European Sociological Review* 23(3): 393–403
- Blekesaune, Morten and Quadagno, Jill. 2003. “Public Attitudes toward Welfare State Policies: A Comparative Analysis of 24 Nations.” *European Sociological Review*, 19(5), 415-427.
- Bonoli, Giuliano., Häusermann, Silja, 2009. “Who wants what from the welfare state?” *European Societies*. 11, 211–232
- Brady, David and Finnigan, Ryan. 2013. “Does Immigration Undermine Public Support for Social Policy?” *American Sociological Review*. 2014, Vol. 79(1) 17 –42
- Brooks, Clem, and Jeff Manza. 2007. *Why Welfare States Persist: The Importance of Public Opinion in Democracies*. Chicago: University of Chicago Press.

Burstein, Paul. 2003. "The Impact of Public Opinion on Public Policy: A Review and an Agenda." *Political Research Quarterly*, Vol. 56, No. 1 : pp. 29-40

Busemeyer, Marius R. and Nikolai, R. 2010. "Education", in F. G. Castles, S. Leibfried, J. Lewis, H. Obinger and C. Pierson (eds.), *The Oxford Handbook of the Welfare State*, Oxford: Oxford University Press.

Busemeyer, Marius.R., Cattaneo, Maria. A. and Wolter, Stefan C. 2011. "Individual Policy Preferences for Vocational versus Academic Education: Micro Level Evidence for the Case of Switzerland", *Journal of European Social Policy* 21(3): 253–73

Busemeyer, Marius.R. 2012. "Inequality and the Political Economy of Education: An Analysis of Individual Preferences in OECD Countries", *Journal of European Social Policy* 22(3): 219–40

Busemeyer, Marius R. 2015. *Skills and Inequality: Partisan Politics and the Political Economy of Education Reforms in Western Welfare States*. Cambridge University Press: Cambridge.

Busemeyer, Marius R. Lergetporer, Philipp and Woessmann, Ludger 2017. "Public opinion and the political economy of educational reforms: A survey". *European Journal of Political Economy*.

Busemeyer, Marius R and Garritzmann, Julian L., 2017a. "Public opinion on policy and budgetary trade-offs in European welfare states: evidence from a new comparative survey". *Journal of European Public Policy*. 24(6). 871-889.

Busemeyer, Marius R and Garritzmann, Julian L., 2017b "Academic, vocational or general? An analysis of public opinion towards education policies with evidence from a new comparative survey". *Journal of European Social Policy*. Vol. 27(4) 373-386.

Busemeyer, Marius R., Garritzmann, Julian L., Neimanns, Erik, Nezi, Roula, 2018. "Investing in education in Europe: evidence from a new survey of public opinion." *Journal of European Social Policy*. 28(1) 35-53.

Cusack, Thomas and Rehm, Philip. 2006. "Risks at Work: The Demand and Supply Sides of Government Redistribution". *Oxford Review of Economic Policy*. 22, 365-389.

Danish government. October 2013. "Aftale om Bedre og mere attractive Erhvervsuddannelser"
Available from <https://uvm.dk/-/media/filer/uvm/udd/erhverv/pdf14/feb/140224-endelig-aftaletekst-25-2-2014.pdf>. Retrieved 20/05-18.

De Deken, Johan. 2017. "Conceptualizing and Measuring Social Investment" in Hemerijck, Anton (ed) *The Uses of Social Investment*. pp. 185-193. Oxford: Oxford University Press

Di Stasi, Valentina. 2017. "'Diversion or safety net?' Institutions and public opinion on vocational education and training". *Journal of European Social Policy*. Vol 27(4) 360-372.

Di Stasi, Valentina and Solga, Heike. 2017. "Education as social policy: An introduction". *Journal of European Social Policy*. Vol. 27(4) 313–319.

Druckman, James N. and Lupia, Arthur. 2000. "Preference formation." *Annual Review of Political Science*, 3(1):1–24

Esping-Andersen, Gøsta. 2002. *Why We Need a New Welfare State*, Oxford: Oxford University Press

Estevez-Abe, Margarita, Iversen, Torben and Soskice, David. 2001. "Social Protection and the Formation of Skills: A Reinterpretation of the Welfare State", in P.A. Hall and D. Soskice (eds) *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*, pp. 145–83. Oxford: Oxford University Press

European Commision. 2012. final COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS. Rethinking Education: Investing in skills for better socio-economic outcomes. 20.11.2012 COM(2012) 669. Strasbourg

Forster, Andrea G., Thijs Bol, and Herman G. van de Werfhorst. 2016. "Vocational Education and Employment over the Life Cycle" *Sociological Science* 3: 473-494.

Garritzmann, Julian.L. 2016. *The Political Economy of Higher Education Finance*. Basingstoke: Palgrave Macmillan

Giddens, Anthony. 1998. *The Third Way: The Renewal of Social Democracy*. Polity Press.

Goerres, Achim & Tepe, Markus, 2010. "Age-based self-interest, intergenerational solidarity and the welfare state: a comparative analysis of older people's attitudes towards public childcare in 12 OECD countries." *European Journal of Political Research*. 49, 818–851.

Hacker, Jacob S., Rehm, Philip and Schlesinger, Mark. 2013. "The Insecure American: Economic Experiences, Financial Worries, and Policy Attitudes". *Perspectives on Politics*. March. Vol. 11/No. 1.

Hampf, Franziska & Woessmann, Ludger. 2017. "Vocational vs. General Education and Employment over the Life Cycle: New Evidence from PIAAC". *CESifo Economic Studies*, 2017, 255–269.

Hanushek, Eric A., Schwerdt, Guido., Woessmann, Ludger, and Zhang Lei. 2017. "General Education, Vocational Education, and Labor-Market Outcomes over the Lifecycle" *Journal of Human Resources Winter*. 2017 vol. 52 no. 1 48-87.

Hassenfeld, Yeheskel and Jane A. Rafferty. 1989. "The Determinants of Public Attitudes Toward the Welfare State." *Social Forces* 67:1027-48

Hemerijck, Anton. 2013. *Changing Welfare States*, Oxford, New York: Oxford University Press

Häusermann, Silja, Kurer, Thomas. and Schwander, Hanna. 2014. “High-Skilled Outsiders? Labor Market Vulnerability, Education and Welfare State Preferences”, *Socio-Economic Review*. Volume 13, Issue 2, 1 April 2015, Pages 235–258,.

Iversen, Torben and Soskice, David. 2001. “An Asset Theory of Social Policy Preferences”. *American Political Science Review*. 95, 875-893.

Iversen, Torben. 2005. *Capitalism, Democracy, and Welfare*. Cambridge: Cambridge University Press.

Iversen, Torben and Stephens, John D. 2008 “Partisan Politics, the Welfare State, and Three Worlds of Human Capital Formation”, *Comparative Political Studies*. 41(4–5): 600–37

Jakobi, Anja P., Martens, Kerstin and Wolf, Klaus D. 2010. “Introduction: A Governance Perspective on Education Policy”, in A.P. Jakobi, K. Martens and K.D. Wolf (eds) *Education in Political Science: Discovering a Neglected Field*, pp. 1–20. London; New York: Routledge.

Jaeger, Mads M. 2006. ‘What Makes People Support Public Responsibility for Welfare Provision: Self-interest or Political Ideology? A Longitudinal Approach’, *Acta Sociologica* 49: 321–38.

Jaeger, Mads. M. 2013. "The effect of macroeconomic and social conditions on the demand for redistribution: A pseudo panel approach." *Journal of European Social Policy* 23(2): 149-163

Jones, Bryan D. 1999. “Bounded rationality.” *Annual Review of Political Science*, 2:297–321

Kangas, Olli, 1997. “Self-interest and the common good: the impact of norms, selfishness and context in social policy opinions.” *Journal of Socio-Economics*. 26 (5), 475–494

Kumlin, Staffan. and Stadelmann-Steffen, Isabelle. (eds) *How Welfare States Shape the Democratic Public: Policy Feedback, Participation, Voting and Attitudes*, Cheltenham, Edward Elgar, 2014

Lergetporer, Philipp., Werner, Katharina. and Woessmann, Ludger. 2017 “Public Opinion on Education Policy in Germany”.

Lijphart, Arend. 1971. "Comparative Politics and the Comparative Method" *American Political Science Review* 65 (September) 682-93

Lupu, Noam and Pontusson, Jonas, 2011. “The structure of inequality and the politics of redistribution.” *American Political Science Review*. 105 (2), 316–336.

Margalit, Yotam. 2013. “Explaining Social Policy Preferences: Evidence from the Great Recession,” *American Political Science Review*. Cambridge University Press, 107(1), pp. 80–103.

McDonnell, Lorraine M. 2009 “Repositioning Politics in Education’s Circle of Knowledge”. *Educational Researcher* 38(6): 417–27.

Meltzer, Allan H., Richard, Scott F., 1981. A rational theory of the size of government. *Journal of Political Economy*. 89, 914–927.

Morel, Nathalie., Palier, Bruno. and Palme, Joakim. (eds). 2011. *Towards a Social Investment State? Ideas, Policies and Challenges*, Bristol: Policy Press

Moulton, Brent R. 1990. “An illustration of a pitfall in estimating the effects of aggregate variables on micro units.” *The Review of Economics and Statistics* pp. 334–33

Neimanns, Erik., Busemeyer, Marius R. and Garritzmman, Julian L. 2018. “How Popular Are Social Investment Policies Really? Evidence from a Survey Experiment in Eight Western European Countries”. *European Sociological Review*. 1-16.

Nikolai, Rita. 2012. “Towards Social Investment? Patterns of Public Policy in the OECD World”, in N. Morel, B. Palier and J. Palme (eds) *Towards a Social Investment Welfare State? Ideas, Policies and Challenges*, pp. 91–116. Chicago, IL: Policy Press.

Page, Benjamin I. and Shapiro, Robert Y. 1992. *The Rational Public: Fifty years of Trends in Americans' Policy Preferences*. The University of Chicago Press: Chicago and London.

Pierson, Paul. 1993 "When Effect Becomes Cause: Policy Feedback and Political Change". *World Politics* 45(4): 595–628

Pierson, Paul. 1994. *Dismantling the Welfare State? Reagan, Thatcher, and the Politics of Retrenchment*. Cambridge: Cambridge University Press.

Pierson, Paul. 2000 "Increasing Returns, Path Dependencies, and the Study of Politics", *The American Political Science Review* 94(2): 251–67

Pierson, Paul. 2001 "Coping with permanent austerity: welfare state restructuring in affluent democracies". in Paul Pierson (ed.), *The New Politics of the Welfare State*, Oxford: Oxford University Press, pp. 410–56.

Pitkin, Hanna, 1967. *The Concept of Representation*, Los Angeles: University of Press.

Rehm, Philipp. 2009. "Risks and redistribution: An individual-level analysis." *Comparative Political Studies*, 42, 855-881.

Rehm, Philipp. 2011. "Social policy by popular demand." *World Politics*, 63(2), 271-299.

Rehm, Philipp, Hacker, Jacob S. and Schlesinger, Mark. 2012. "Insecure Alliances: Risk, Inequality, and Support for the Welfare State". *American Political Science Review*. Vol. 106, No. 2 May.

Sartori, Giovanni. 1970. "Concept Misformation in Comparative Politics." *American Political Science Review*. 64:1033-53

Saward, Michael. 2008. "Representation and Democracy: Revisions and Possibilities." *Sociology Compass*, 2: 1000-1013.

Sommet, Nicolas and Morselli, David. 2017. “Keep Calm and Learn Multilevel Logistic Modeling: A Simplified Three Step Procedure Using Stata, R, Mplus, and SPSS”. *International Review of Social Psychology*. 30(1), 203–218.

Soroka, Stuart N., and Wlezien, Christopher. 2010. *Degrees of Democracy: Politics, Public Opinion, and Policy*. Cambridge: Cambridge University Press.

Stegmueller, Daniel. 2013. “How Many Countries Do You Need for Multilevel Modeling? A Comparison of Frequentist and Bayesian Approaches.” *American Journal of Political Science* 57(3):748–61

Stegmueller, Daniel, Peer Scheepers, Sigrid Rossteutscher, and Eelke de Jong. 2012. “Support for Redistribution in Western Europe: Assessing the Role of Religion.” *European Sociological Review* 28(4):482–97.

Svallfors, Stefan. 2012. Welfare states and welfare attitudes. Stefan Svallfors (Ed.), *Contested Welfare States: Welfare Attitudes in Europe and Beyond*, Stanford University Press, Stanford, pp. 1-24

Sørensen, Rune J., 2013. “Does ageing affect preferences for welfare spending? A study of peoples' spending preferences in 22 countries, 1985–2006.” *European Journal of Political Economy*. 29, 259–271.

Taylor-Gooby, Peter. (ed.) 2004. *New Risks, New Welfare: The Transformation of the European Welfare State*, Oxford: Oxford University Press,

Thelen, Kathleen. 2004. *How Institutions Evolve: The Political Economy of Skills in Germany, Britain, the United States, and Japan*. Cambridge: Cambridge University Press

Wößmann, Ludger, Lergetporer, Philipp, Kugler, Franziska and Werner, Katharina. 2014 “Was die Deutschen über die Bildungspolitik denken – Ergebnisse des ersten ifo Bildungsbarometers”, *Ifo Schnelldienst* 67(18): 16–33.

Zimmermann, Klaus F., Costanza Biavaschi, Werner Eichhorst, Corrado Giulietti, Michael J. Kendzia, Alexander Muravyev, Janneke Pieters, Núria Rodríguez-Planas, and Ricarda Schmidl. 2013. Youth unemployment and vocational training. Boston: Now Publishers, Inc.

Appendix 1

	VET	HE	One sector	Encourage	TaxVET	TaxHE
Age	0.0471*** (0.0128)	0.00235 (0.0117)	0.0727*** (0.0125)	0.0763*** (0.0138)	0.0356* (0.0140)	-0.0147** (0.00461)
Gender	0.00376 (0.0129)	-0.0274 (0.0200)	0.00792 (0.0278)	-0.0330*** (0.00942)	-0.0352* (0.0159)	-0.0470* (0.0204)
Have kids	-0.0245* (0.0108)	0.0288* (0.0122)	-0.0454 (0.0245)	-0.0194 (0.0146)	-0.0450*** (0.0134)	-0.00412 (0.0144)
Education	0.00982 (0.00842)	0.0340*** (0.00563)	-0.0242 (0.0144)	-0.0291*** (0.00684)	-0.0137 (0.00861)	0.0117 (0.00742)
Ideology	-0.0109** (0.00363)	-0.0187*** (0.00541)	0.000785 (0.00608)	0.0176*** (0.00491)	-0.0133*** (0.00365)	-0.0155*** (0.00327)
Income	-0.00174 (0.00527)	-0.0136* (0.00658)	0.0106 (0.00698)	-0.00410 (0.00681)	-0.0122* (0.00544)	-0.0187** (0.00703)
Spain	0.258*** (0.00852)	0.137*** (0.00690)	-0.0298 (0.0180)	-0.0846*** (0.00781)	0.300*** (0.00701)	0.226*** (0.00484)
Italy	0.275*** (0.00561)	0.138*** (0.00887)	0.0296 (0.0217)	-0.0140 (0.0103)	0.189*** (0.00916)	0.0934*** (0.00912)
Ireland	0.131*** (0.00360)	-0.0691*** (0.00376)	-0.0255*** (0.00269)	-0.106*** (0.00217)	0.196*** (0.00314)	0.0524*** (0.00296)
France	0.234*** (0.00429)	-0.127*** (0.00430)	0.255*** (0.00794)	0.129*** (0.00571)	0.273*** (0.00427)	-0.0188*** (0.00330)
Sweden	0.158*** (0.00305)	-0.123*** (0.00190)	0.144*** (0.00637)	-0.102*** (0.00319)	0.264*** (0.00249)	0.0723*** (0.00255)
UK	0.128*** (0.00501)	-0.0764*** (0.00431)	0.169*** (0.00623)	0.0856*** (0.00601)	0.262*** (0.00547)	0.0779*** (0.00350)
Denmark	0.207*** (0.00409)	-0.163*** (0.00382)	0.254*** (0.00359)	0.0351*** (0.00320)	0.261*** (0.00385)	0.0350*** (0.00388)
Germany	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)
<i>N</i>	5418	5410	2345	4142	5390	5403

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Appendix 2

Regression table for INVEDUC Average marginal effects with robust standard errors. It is clear that the standard errors are too large to make the coefficients usable, and that country-clustered errors are to prefer.

	(1) VET	(2) HE	(3) One Sector	(4) Encourage	(5) TaxVET	(6) TaxHE
Age	0.214*** (6.15)	0.0219 (0.65)	0.337*** (6.21)	0.399*** (9.36)	0.156*** (4.56)	-0.0614 (-1.81)
Gender	0.0106 (0.16)	-0.143* (-2.26)	0.0363 (0.35)	-0.149 (-1.87)	-0.194** (-3.05)	-0.230*** (-3.60)
Have kids	-0.108 (-1.60)	0.0975 (1.47)	-0.201 (-1.90)	-0.0795 (-0.97)	-0.194** (-2.94)	0.00862 (0.13)
Education	0.0402 (1.78)	0.152*** (6.84)	-0.103** (-2.77)	-0.156*** (-5.70)	-0.0521* (-2.36)	0.0513* (2.31)
Ideology	-0.0367** (-2.71)	-0.0703*** (-5.31)	0.00981 (0.46)	0.0837*** (5.03)	-0.0495*** (-3.73)	-0.0671*** (-4.94)
Income	-0.00350 (-0.15)	-0.0611** (-2.61)	0.0508 (1.33)	-0.0154 (-0.53)	-0.0493* (-2.12)	-0.0806*** (-3.45)
Spain	1.137*** (9.96)	0.621*** (5.51)	-0.227 (-1.21)	-0.362** (-2.68)	1.286*** (11.25)	0.968*** (8.71)
Italy	1.199*** (9.51)	0.607*** (4.94)	0.128 (0.64)	-0.0503 (-0.34)	0.807*** (6.73)	0.409*** (3.42)
Ireland	0.571*** (5.02)	-0.240* (-2.14)	-0.0936 (-0.43)	-0.447** (-3.14)	0.829*** (7.24)	0.229* (1.97)
France	1.062*** (9.14)	-0.514*** (-4.64)	1.199*** (6.12)	0.686*** (4.47)	1.157*** (10.13)	-0.0889 (-0.77)
Sweden	0.820*** (7.44)	-0.518*** (-4.79)	0.784*** (3.48)	-0.367** (-2.62)	1.215*** (10.90)	0.326** (2.95)
UK	0.541*** (4.68)	-0.304** (-2.69)	0.744*** (3.41)	0.516*** (3.33)	1.075*** (9.09)	0.315** (2.69)
Denmark	0.910*** (7.38)	-0.696*** (-5.77)	1.239*** (5.61)	0.216 (1.38)	1.189*** (9.66)	0.162 (1.30)
Germany	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)

_cons	-0.433 [*]	0.342	-0.131	0.707 ^{**}	0.0259	0.121
	(-2.36)	(1.93)	(-0.43)	(3.17)	(0.14)	(0.67)
<i>N</i>	4780	4773	2098	3725	4761	4767

t statistics in parentheses

^{*} $p < 0.05$, ^{**} $p < 0.01$, ^{***} $p < 0.001$